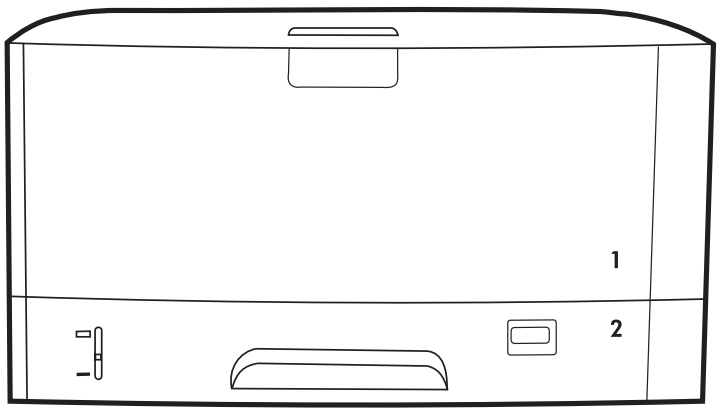
HP LaserJet 5200L Series printers
User Guide



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HP LaserJet 5200L Series printers

User Guide

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HP Customer Care

Online Services

For 24-hour access to updated HP printer-specific software, product information, and support information through an Internet connection, go to the Web site: www.hp.com/support/lj5200l.

HP Instant Support Professional Edition (ISPE) is a suite of Web-based troubleshooting tools for desktop computing and printing products. Go to instantsupport.hp.com.

Telephone support

HP provides free telephone support during the warranty period. For the telephone number for your country/region, see the flyer that shipped with the printer, or visit www.hp.com/support/. Before calling HP, have the following information ready: the product name and serial number, the date of purchase, and a description of the problem.

Software utilities, drivers, and electronic information

www.hp.com/go/lj5200l_software

The Web page for the drivers is in English, but you can download the drivers themselves in several languages.

HP direct ordering for accessories or supplies

- United States: www.hp.com/sbso/product/supplies.
- Canada: www.hp.ca/catalog/supplies
- Europe: www.hp.com/supplies
- Asia-Pacific: www.hp.com/paper/

To order genuine HP parts or accessories, go to the HP Parts Store at www.hp.com/buy/parts (U.S. and Canada only), or call 1-800-538-8787 (U.S.) or 1-800-387-3154 (Canada).

HP service information

To locate HP-Authorized Dealers, call 1-800-243-9816 (U.S.) or 1-800-387-3867 (Canada).

Outside the United States and Canada, call the customer support number for your country/region. See the flyer that shipped in the box with the printer.

HP service agreements

Call 1-800-835-4747 (U.S.) or 1-800-268-1221 (Canada).

For extended service, call 1-800-446-0522.

HP Easy Printer Care software

To check the printer status and settings and view troubleshooting information and online documentation, use the HP Easy Printer Care software. You must have performed a full software installation in order to use the HP Easy Printer Care software. See Using the HP Easy Printer Care software.

HP support and information for Macintosh computers

Go to www.hp.com/go/macosx for Macintosh OS X support information and HP subscription service for driver updates.

Go to www.hp.com/go/mac-connect for products that are designed specifically for the Macintosh user.

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1 Printer basics

Now that the printer is set up and ready to use, take a few moments to familiarize yourself with the printer. This chapter contains basic information about the printer features:

- Quick access to printer information
- Printer at a glance
- Features at a glance
- Walkaround
- Printer software
- Selecting print media

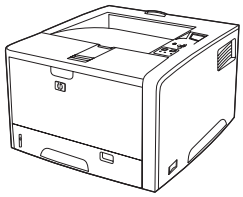
Quick access to printer information

Several references are available for use with this printer. See www.hp.com/support/lj5200l.

Guide	Description
Getting started guide	Provides step-by-step instructions for installing and setting up the printer.
User guide	Provides detailed information for using and troubleshooting the printer. Available on the printer CD.
Online Help	Provides information about options that are available in the printer drivers. To view a Help file, open the online Help through the printer driver.

Printer at a glance

HP LaserJet 5200L



- Prints up to 25 pages-per-minute (ppm)
- 32 megabytes (MB) of random access memory (RAM), upgradable up to 128 MB
- 100-sheet multipurpose tray (tray 1), 250-sheet input tray (tray 2), and 250-sheet output bin
- Hi-Speed universal serial bus (USB) 2.0 port and IEEE 1284-compliant parallel port
- One open dual inline memory module (DIMM) slot

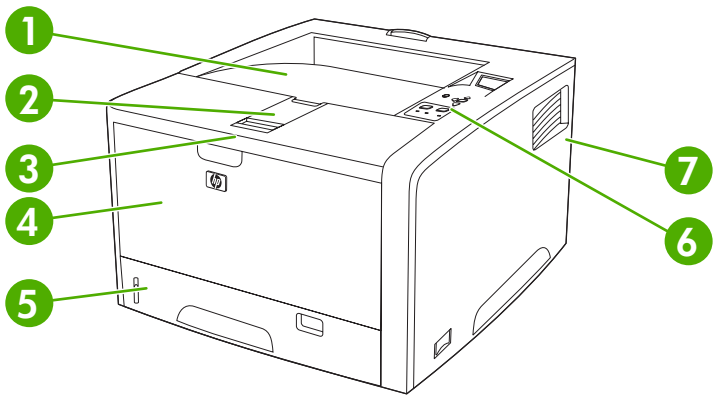
Features at a glance

Feature	Description
Performance	• 460 MHz processor
User interface	• Control-panel help • Show Me How help topics in the control panel • HP Easy Printer Care software (a Windows®-based status and troubleshooting tool) • Windows and Macintosh printer drivers
Printer drivers	• HP PCL 5e • HP PCL 6 • PostScript® 3 emulation
Resolution	• Produces 600-dots-per-inch (dpi) print quality for fast, high-quality printing of business text and graphics
Storage features	• Fonts, forms, and other macros • Job retention
Fonts	• 80 internal fonts available for both PCL and PostScript 3 emulation • 80 printer-matching screen fonts in TrueType format available with the software solution
Accessories	• 100-pin 133 MHz dual inline memory modules (DIMMs)
Connectivity	• IEEE 1284-compliant parallel connection • Hi-Speed USB 2.0 connection
Environmental features	• Sleep delay setting • ENERGY STAR® qualified
Supplies	• The supplies status page contains information about toner level, page count, and estimated pages remaining. • The printer checks for and authentic HP print cartridge at cartridge installation. • Internet-enabled supply-ordering capabilities (using HP Easy Printer Care software)
Accessibility	• The online user guide is compatible with text screen-readers. • The print cartridge can be installed and removed by using one hand. • All doors and covers can be opened by using one hand. • Media can be loaded in tray 1 by using one hand.

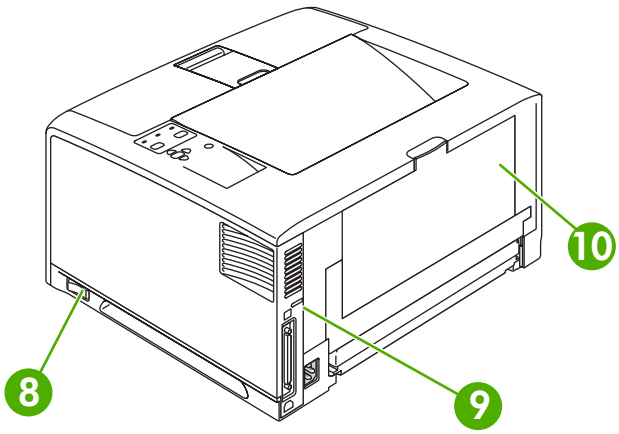
Walkaround

Printer parts

Before using the printer, familiarize yourself with the parts of the printer.



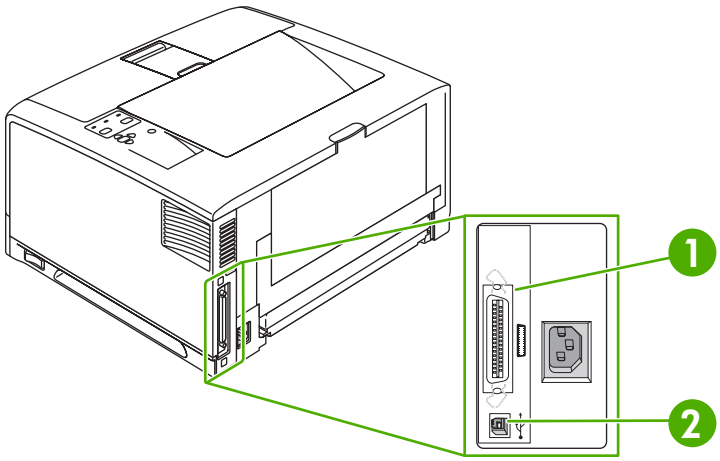
1	Top output bin
2	Long-media extension
3	Latch to open the front cover (provides access to the print cartridge)
4	Tray 1 (pull to open)
5	Tray 2
6	Control panel
7	Right-side cover (provides access to DIMMs)



8	On/off switch
9	Interface ports (see Interface ports)
10	Rear output bin (pull to open)

Interface ports

The printer has two ports for connecting to a computer.



1	IEEE 1284B-compliant parallel connection
2	Hi-Speed USB 2.0 connection

Printer software

The printing-system software is included with the printer. See the getting started guide for installation instructions.

The printing system includes software for end users and network administrators, and printer drivers for access to the printer features and communication with the computer.

NOTE For a list of printer drivers and updated HP printer software, go to www.hp.com/go/lj5200l_software.

Printer drivers

Printer drivers allow you to gain access to the printer features and allow the computer to communicate with the printer (using a printer language). Check the installation notes and readme files on the printer CD for additional software and languages.

The HP LaserJet 5200L printer uses the PCL 5e, PCL 6, and PostScript 3 emulation printer description language (PDL) drivers.

- Use the PCL 6 printer driver for the best overall performance.
- Use the PCL 5 printer driver for general office printing.
- Use the PS driver for printing from PostScript-based programs, for compatibility with PostScript Level 3 needs, or for PS flash font support.

Operating system[1]	PCL 5e	PCL 6	PS 3 emulation
Windows 98, Windows Millennium (Me)	✔	✔	✔
Windows 2000[2]	✔	✔	✔
Windows XP (32-bit)[3]	✔	✔	✔
Windows Server 2003 (32-bit)	✔	✔	✔
Windows Server 2003 (64-bit)	✔	✔	✔
Mac OS X V10.2 and later			✔

1 Not all printer features are available from all drivers or operating systems.
2 For Windows 2000 and Windows XP (32-bit and 64-bit), download the PCL 5 driver from www.hp.com/go/lj5200l_software.
3 For Windows XP (64-bit), download the PCL 6 driver from www.hp.com/go/lj5200l_software.

The printer drivers include online Help that has instructions for common printing tasks and also describes the buttons, checkboxes, and drop-down lists that are in the printer driver.

Driver Autoconfiguration

The HP LaserJet PCL 6 and PCL 5e drivers for Windows and the PS drivers for Windows 2000 and Windows XP feature automatic discovery and driver configuration for printer accessories at the time of installation. Accessories that the Driver Autoconfiguration supports are dual inline memory modules (DIMMs). If the environment supports bidirectional communication, the installer presents

Driver Autoconfiguration as an installable component by default for a typical installation and for a custom installation.

Update Now

If you have modified the configuration of the HP LaserJet 5200L printer since installation, the driver can be automatically updated with the new configuration in environments that support bidirectional communication. To change the configuration automatically, complete the following steps:

1. On the Windows taskbar, click **Start**, and then click **Printers**. Right-click the printer, and then click **Properties**.
2. In the **Properties** dialog box, click the **Device Settings** tab.
3. Under **Installable Options**, click **Automatic Configuration**.
4. In the drop-down box, click **Update Now**, and then click **Apply**.

NOTE The **Update Now** feature is not supported in environments where shared Windows NT® 4.0, Windows 2000, or Windows XP clients are connected to Windows NT 4.0, Windows 2000, or Windows XP hosts.

HP Driver Preconfiguration

HP Driver Preconfiguration is a software architecture and set of tools that you can use to customize and distribute HP software in managed corporate printing environments. Using HP Driver Preconfiguration, information technology (IT) administrators can preconfigure the printing and device defaults for HP printer drivers before installing the drivers. For more information, see the *HP Driver Preconfiguration Support Guide*, which is available at www.hp.com/support/lj5200l.

Additional drivers

The following drivers are not included on the CD, but are available from www.hp.com/go/lj5200l_software.

- UNIX® model scripts
- Linux drivers

Opening the printer drivers

Operating System	To change the settings for all print jobs until the software program is closed	To change the default settings for all print jobs	To change the product configuration settings
Windows 98 and Me	1. On the **File** menu in the software program, click **Print**. 2. Select the driver, and then click **Properties**. The steps can vary; this procedure is most common.	1. Click **Start**, click **Settings**, and then click **Printers**. 2. Right-click the driver icon, and then select **Properties**.	1. Click **Start**, click **Settings**, and then click **Printers**. 2. Right-click the driver icon, and then select **Properties**. 3. Click the **Configure** tab.
Windows 2000, XP, and Server 2003	1. On the **File** menu in the software program, click **Print**. 2. Select the driver, and then click **Properties** or **Preferences**. The steps can vary; this procedure is most common.	1. Click **Start**, click **Settings**, and then click **Printers** or **Printers and Faxes**. 2. Right-click the driver icon, and then select **Printing Preferences**.	1. Click **Start**, click **Settings**, and then click **Printers** or **Printers and Faxes**. 2. Right-click the driver icon, and then select **Properties**. 3. Click the **Device Settings** tab.
Mac OS X V10.2 or later	1. On the **File** menu, click **Print**. 2. Change the settings that you want on the various pop-up menus.	1. On the **File** menu, click **Print**. 2. Change the settings that you want on the various pop-up menus. 3. On the **Presets** pop-up menu, click **Save as** and type a name for the preset. These settings are saved in the **Presets** menu. To use the new settings, you must select the saved preset option every time you open a program and print.	1. In the Finder, on the **Go** menu, click **Applications**. 2. Open **Utilities**, and then open **Print Center** (Mac OS X V10.2) or **Printer Setup Utility** (Mac OS X V10.3 or Mac OS X V10.4). 3. Click on the print queue. 4. On the **Printers** menu, click **Show Info**. 5. Click the **Installable Options** menu. **NOTE** Configuration settings might not be available in Classic mode.

Software for Macintosh computers

The HP installer provides PostScript® Printer Description (PPD) files, Printer Dialog Extensions (PDEs), and the HP Printer Utility for use with Macintosh computers.

The printing system software includes the following components:

- **PostScript Printer Description (PPD) files**

  The PPDs, in combination with the Apple PostScript printer drivers, provide access to printer features. Use the Apple PostScript printer driver that comes with the computer.

- **HP Printer Utility**

  Use the HP Printer Utility to set up printer features that are not available in the printer driver:

  - Name the printer.
  - Assign an internet protocol (IP) address to the printer.
  - Download files and fonts.

  You can use the HP Printer Utility when your printer uses a universal serial bus (USB) cable. For more information, see Using the HP Printer Utility for Macintosh.

NOTE The HP Printer Utility is supported for Mac OS X V10.2 or later.

Installing Macintosh printing system software for direct connections (USB)

NOTE Macintosh computers do *not* support parallel port connections.

The Apple PostScript driver must be installed in order to use the PPD files. Use the Apple PostScript driver that came with your Macintosh computer.

1. Connect a USB cable between the USB port on the printer and the USB port on the computer. Use a standard 2-meter (6.56-foot) USB cable.
2. Insert the printer CD into the CD-ROM drive and run the installer. If the CD menu not run automatically, double-click the CD icon on the desktop.
3. Double-click the **Installer** icon in the HP LaserJet Installer folder.
4. Follow the instructions on the computer screen.

   USB queues are created automatically when the printer is attached to the computer. However, the queue will use a generic PPD if the installer has not been run before the USB cable is connected. Complete the following steps to change the queue PPD.
5. Open the Print Center or Printer Setup Utility.
6. Select the correct printer queue, and then click **Show Info** to open the **Printer Info** dialog box.
7. In the pop-up menu, select **Printer Model**, and then, in the pop-up menu in which **Generic** is selected, select the correct PPD for the printer.
8. Print a test page from any software program to make sure that the software is correctly installed.

   If installation fails, reinstall the software. If this fails, see the installation notes or late-breaking readme files on the printer CD or the flyer that came in the printer box for help.

To remove software from Macintosh operating systems

To remove the software from a Macintosh computer, drag the PPD files to the trash can.

UNIX

For HP-UX and Solaris networks, go to www.hp.com/support/net_printing to download the HP Jetdirect printer installer for UNIX.

Linux

For information, go to www.hp.com/go/linuxprinting.

Utilities

The printer is equipped with several utilities that make it easy to monitor and manage the printer.

HP Easy Printer Care software

The HP Easy Printer Care software is a program that you can use for the following tasks:

- Checking the printer status
- Checking the supplies status
- Setting up alerts
- Viewing printer documentation
- Gaining access to troubleshooting and maintenance tools

Perform a complete software installation in order to use the HP Easy Printer Care software.

Other components and utilities

Windows	Macintosh OS
• Software installer — automates the printing system installation • Online Web registration	• PostScript Printer Description files (PPDs) — use with the Apple PostScript drivers that come with the Mac OS • The HP Printer Utility—change printer settings, view status, and set up printer-event notification from a Mac. This utility is supported for Mac OS X V10.2 and later.

Selecting print media

This printer accepts a variety of media, such as cut-sheet paper, including up to 100% recycled fiber content paper; envelopes; labels; transparencies; and custom-size paper. Properties such as weight, composition, grain, and moisture content are important factors that affect printer performance and output quality. Paper that does not meet the guidelines that are outlined in this manual can cause the following problems:

- Poor print quality
- Increased jams
- Premature wear on the printer, requiring repair

NOTE Some paper might meet all of the guidelines in this manual and still not produce satisfactory results. This might be the result of improper handling, unacceptable temperature and humidity levels, or other variables over which Hewlett-Packard has no control. Before purchasing large quantities of media, make sure that it meets the requirements that are specified in this user guide and in the *HP LaserJet Printer Family Print Media Guide*, which is available for download at http://www.hp.com/support/ljpaperguide. Always test paper before buying large quantities.

CAUTION Using media that does not meet HP specifications can cause problems for the printer, requiring repair. This repair is not covered by the HP warranty or service agreements.

Supported media sizes

Media size	Dimensions	Tray 1	Tray 2	Duplex[1]
Letter	216 x 279 mm (8.5 x 11 in) 60 to 199 g/m^2 (16 to 53 lb)	✔	✔	✔
Letter-R	279 x 216 mm (11 x 8.5 in)	✔	✔	✔
A4	211 x 297 mm (8.3 x 11.7 in)	✔	✔	✔
A4-R	297 x 211 mm (11.7 x 8.3 in)	✔	✔	✔
Legal	216 x 356 mm (8.5 x 14 in)	✔	✔	✔
Executive	185 x 267 mm (7.3 x 10.5 in)	✔	✔	✔
Executive (JIS)	216 x 330 mm (8.5 x 13 in)	✔	✔	✔
A5	147 x 211 mm (5.8 x 8.3 in)	✔	✔	✔
B5 (JIS)	183 x 257 mm (7.2 x 10.1 in)	✔	✔	✔
11 x 17	279 x 432 mm (11 x 17 in)	✔	✔	✔
A3	297 x 419 mm (11.7 x 16.5 in)	✔	✔	✔

Media size	Dimensions	Tray 1	Tray 2	Duplex[1]
B4 (JIS)	257 x 363 mm (10.1 x 14.3 in)	✔	✔	✔
8K	269 x 391 mm (10.6 x 15.4 in)	✔	✔	✔
8K	259 x 368 mm (10.2 x 14.5 in)	✔	✔	✔
8K	273 x 394 mm (10.75 x 15.5 in)	✔	✔	✔
16K	184 x 260 mm (7.24 x 10.24 in)	✔	✔	✔
16K	195 x 270 mm (7.68 x 10.63 in)	✔	✔	✔
16K	273 x 197 mm (10.75 x 7.75 in)	✔	✔	✔
Statement	140 x 216 mm (5.5 x 8.5 in)	✔	✔	✔
12 x 18	305 x 457 mm (12 x 18 in)	✔		✔
A6	105 x 148 mm (4.14 x 5.83 in)	✔		✔
RA3	305 x 430 mm (12 x 16.93 in)	✔		✔
B6	128 x 182 mm (5.1 x 7.2 in)	✔		✔
S Postcard (JIS)	100 x 148 mm (3.94 x 5.83 in)	✔		✔
D Postcard (JIS)	148 x 200 mm (5.83 x 7.87 in)	✔		✔
Envelope #10	105 x 241 mm (4.13 x 9.5 in)	✔		
Envelope Monarch	98 x 191 mm (3.87 x 7.5 in)	✔		
Envelope C5	162 x 229 mm (6.38 x 9 in)	✔		
Envelope DL	110 x 220 mm (4.33 x 8.66 in)	✔		
Envelope B5	176 x 250 mm (6.93 x 9.84 in)	✔		
Custom		✔	✔	✔

[1] For more information about duplexing, see Printing on both sides (duplexing).

For more information about using print media, see Paper specifications.

Supported media types

Media type	Weight	Tray 1	Tray 2	Duplex[1]
Plain	60 to 199 g/m^2 (16 to 53 lb)	✔		✔

Media type	Weight	Tray 1	Tray 2	Duplex[1]
Plain	60 to 120 g/m^2 (16 to 32 lb)	✔	✔	✔
Preprinted	60 to 120 g/m^2 (16 to 32 lb)	✔	✔	✔
Letterhead	60 to 120 g/m^2 (16 to 32 lb)	✔	✔	✔
Transparency	0.10 to 0.14 mm thick (4.7 to 5 mils thick)	✔	✔	
Prepunched	60 to 120 g/m^2 (16 to 32 lb)	✔	✔	✔
Bond	60 to 120 g/m^2 (16 to 32 lb)	✔	✔	✔
Recycled	60 to 120 g/m^2 (16 to 32 lb)	✔	✔	✔
Envelopes	75 to 90 g/m^2 (20 to 24 lb)	✔		
Colored paper	60 to 120 g/m^2 (16 to 32 lb)	✔	✔	✔
Labels	0.10 to 0.14 mm thick (4.7 to 5 mils thick)	✔	✔	
Cardstock	135 to 176 g/m^2 (36 to 47 lb)	✔		✔
Rough		✔		
Light	60 to 75 g/m^2 (16 to 20 lb)	✔		✔
Vellum	60 to 120 g/m^2 (16 to 32 lb)	✔		
Tough Paper	0.10 to 0.14 mm thick (4.7 to 5 mils thick)	✔		
Postcard	135 to 176 g/m^2 (36 to 47 lb)	✔		✔
Custom	60 to 199 g/m^2 (16 to 53 lb)	✔	✔	✔

[1] For more information about duplexing, see Printing on both sides (duplexing).

2 Control panel

This section explains the printer control panel and menus:

- Overview
- Control-panel layout
- Using the control-panel menus
- Show Me How menu
- Retrieve Job menu
- Information menu
- Paper Handling menu
- Configure Device menu
- Diagnostics menu
- Service menu
- Changing printer-control-panel configuration settings

Overview

You can perform most routine printing tasks from the computer by using the program or printer driver. These two methods are the most convenient way to control the printer, and they will override the printer-control-panel settings. See the Help file for your program, or, for more information about gaining access to the printer driver, see Opening the printer drivers.

You can also control the printer by changing settings at the printer control panel. Use the control panel to gain access to printer features that the program or printer driver do not support.

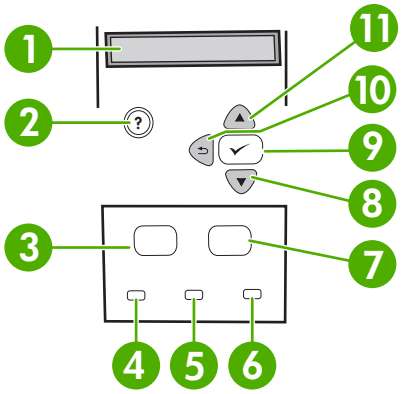
You can print a menu map at the printer control panel that shows the settings with the currently selected values (see Using printer information pages).

Some menus or menu items appear only if certain options are installed in the printer.

Control-panel layout

The control-panel display gives you complete, timely information about the printer and print jobs. Menus provide access to printer functions and detailed information.

The message and prompt areas of the display alert you to the state of the printer and tell you how to respond.



Number	Button or light	Function
1	Control-panel display	• Shows status information, menus, help information, and error messages.
2	Help (?) button	• Provides information about the message on the control-panel display.
3	Menu button	• Opens and closes the menus.
4	Ready light	• **On**: The printer is online and ready to accept data to print. • **Off**: The printer cannot accept data because it is offline (paused) or has experienced an error. • **Blinking**: The printer is going offline. The printer stops processing the current print job and expels all of the active pages from the paper path.
5	Data light	• **On**: The printer has data to print, but is waiting to receive all of the data. • **Off**: The printer has no data to print. • **Blinking**: The printer is processing or printing the data.
6	Attention light	• **On**: The printer has experienced a problem. Make note of the message on the control-panel display, and then turn the printer off and on. See Control-panel messages for help in resolving problems. • **Off**: The printer is functioning without error. • **Blinking**: Action is required. See the control-panel display.
7	Stop button	• Cancels the current print job in process and expels all of the active pages from the paper path. The time that it takes to cancel the job depends on the size of the print job. (Press the button only once.) Also clears continuable errors that are associated with the canceled job.

Number	Button or light	Function
		NOTE The control-panel lights cycle while the print job is cleared from both the printer and the computer, and then the printer returns to the Ready state.
8	Down (▼) button	• Navigates to the next item in the list, or decreases the value of numeric items
9	Select (✓) button	• Clears an error condition when the condition is clearable • Saves the selected value for an item • Performs the action that is associated with the item that is highlighted on the control-panel display
10	Back (⮌) button	• Backs up one level in the menu tree or backs up one numeric entry • Closes menus if held down for more than 1 second
11	Up (▲) button	• Navigates to the previous item in the list, or increases the value of numeric items

Using the control-panel menus

To gain access to the control-panel menus, complete the steps below.

To use the menus

1. Press Menu.
2. Press ▲ or ▼ to navigate the listings.
3. Press ✓ to select the appropriate option.
4. Press ⮌ to return to the previous level.
5. Press Menu to exit the menu.
6. Press **?** to see additional information about a menu.

The following are the main menus.

Main menus	**SHOW ME HOW**
	RETRIEVE JOB
	INFORMATION
	PAPER HANDLING
	CONFIGURE DEVICE
	DIAGNOSTICS
	SERVICE

Show Me How menu

Each choice in the **SHOW ME HOW** menu prints a page that provides more information.

Item	Explanation
CLEAR JAMS	Prints a page that shows how to clear media jams.
LOAD TRAYS	Prints a page that shows how to load the printer input trays.
LOAD SPECIAL MEDIA	Prints a page that shows how to load special media, such as envelopes and transparencies.
PRINT BOTH SIDES	Prints a page that shows how to use the two-sided (duplex) printing function.
SUPPORTED PAPER	Prints a page that shows supported media weights and sizes for the printer.
MORE HELP	Prints a page that shows links to additional help on the Web.

Retrieve Job menu

This menu provides a list of the stored jobs in the printer and access to all the job storage features. You can print or delete these jobs at the printer control panel. You must have 80 MB of memory installed to use this feature. See Managing stored jobs for more information about using this menu.

NOTE If you turn the printer power off, all stored jobs are deleted.

Item	Values	Explanation
USER [X]	**[JOBNAME]** **ALL PRIVATE JOBS** **NO STORED JOBS**	**USER [X]**: The name of the person who sent the job. **[JOBNAME]**: The name of the job stored in the printer. Select one of your jobs or all of your private jobs that were assigned a personal identification number (PIN) in the printer driver. • **PRINT**: Prints the selected job. **PIN REQUIRED TO PRINT:** A prompt that appears for jobs that were assigned a PIN in the printer driver. You must enter the PIN to print the job. **COPIES**: You can select the number of copies that you want to print (**1 to 32000**). • **DELETE**: Deletes the selected job from the printer. **PIN REQUIRED TO DELETE**: A prompt that appears for jobs that were assigned a PIN in the printer driver. You must enter the PIN to delete the job. **ALL PRIVATE JOBS**: Appears if two or more private jobs are stored in the printer. Selecting this item prints all of the private jobs that are stored in the printer for that user, after the correct PIN is entered. **NO STORED JOBS**: Indicates that no stored jobs are available to print or delete.

Information menu

The **INFORMATION** menu contains printer information pages that give details about the printer and its configuration. Scroll to the information page that you want, and then press ✓.

For more information about any of the printer information pages, see Using printer information pages.

Item	Explanation
PRINT MENU MAP	Prints the control panel menu map that shows the layout and current settings for the printer control-panel menu items.
PRINT CONFIGURATION	Prints the current printer configuration. If an HP Jetdirect print server is installed, an HP Jetdirect configuration page will print out as well.
PRINT SUPPLIES STATUS PAGE	Prints a supplies status page that shows the supplies levels for the printer, an approximate number of pages remaining, cartridge-usage information, the serial number, a page count, and ordering information. This page is available only if you are using genuine HP supplies.
PRINT USAGE PAGE	Prints a page that shows a count of all paper sizes that have passed through the printer, lists whether they were one-sided or two-sided, and shows a page count.
PRINT PCL FONT LIST	Prints a PCL font list that shows all the PCL fonts that are currently available to the printer.
PRINT PS FONT LIST	Prints a PS font list that shows all the PS fonts that are currently available to the printer.

Paper Handling menu

If paper-handling settings are correctly configured at the printer control panel, you can print by selecting the type and size of media in the program or the printer driver. For more information about configuring for media types and sizes, see Controlling print jobs. For more information about supported media types and sizes, see Supported media sizes and Paper specifications.

Some items on this menu (such as duplex and manual feed) are available in the program or the printer driver (if the appropriate driver is installed). Program and printer-driver settings override control-panel settings. For more information, see Printer drivers.

Item	Values	Explanation
TRAY 1 SIZE	List of available media sizes for tray 1	Use this item to set the value to correspond with the media size that is currently loaded in tray 1. See Supported media sizes for a list of available sizes. The default setting is **ANY SIZE**. **ANY SIZE**: If both the type and size for tray 1 are set to **ANY**, the printer will pull media from tray 1 first if media is loaded in the tray. A size other than **ANY SIZE**: The printer does not pull from this tray unless the type or size of the print job matches the type and size that is loaded in this tray.
TRAY 1 TYPE	List of available media types for tray 1	Use this item to set the value to correspond with the type of media that is currently loaded in tray 1. See Supported media sizes for a list of available types. The default setting is **ANY TYPE**. **ANY TYPE**: If both the type and size for tray 1 are set to **ANY**, the printer will pull media from tray 1 first if the media is loaded in the tray. A type other than **ANY TYPE**: The printer does not pull from this tray.
TRAY 2 SIZE	List of available media sizes	The tray automatically detects the media size based on the media-size wheel setting in the tray. The default setting is either **LTR** (letter) for 100 V engines or **A4** for 200 V engines.
TRAY 2 TYPE	List of available media types	Sets the value to correspond with the media type that is currently loaded in tray 2. The default setting is **ANY TYPE**.
TRAY [N]	**UNIT OF MEASURE** **X DIMENSION** **Y DIMENSION**	This item appears only if a tray is set to a custom size. **UNIT OF MEASURE**: Use this option to select the unit of measure (**INCHES** or **MILLIMETERS**) to use when you set custom paper sizes for the specified tray. **X DIMENSION**: Use this item to set the measurement of the width of the paper (measurement from side to side in the tray). The options are **3.0 to 12.28 INCHES** or **76 to 312 MM**. **Y DIMENSION**: Use this item to set the measurement of the length of the paper (measurement from front to back in the tray). The options are **5.0 to 18.5 INCHES** or **127 to 470 MM**. After the **Y DIMENSION** value is selected, a summary screen appears. This screen contains feedback that summarizes all of the information that was specified on the previous three screens, such as **TRAY 1 SIZE= 8 x 16 INCHES, Setting saved.**

Configure Device menu

This menu contains administrative functions. The **CONFIGURE DEVICE** menu allows the user to change the default printing settings, adjust the print quality, and change the system configuration and I/O options.

Printing submenu

Some items on this menu are available in the program or printer driver (if the appropriate driver is installed). Program and printer-driver settings override control-panel settings. In general, it is better to change these settings in the printer driver, if applicable.

Item	Values	Explanation
COPIES	**1 to 32000**	Sets the default number of copies by selecting any number from 1 to 32000. Use ▲ or ▼ to select the number of copies. This setting applies only to print jobs that do not have the number of copies specified in the program or printer driver, such as a UNIX or Linux program. The default setting is **1**. **NOTE** It is best to set the number of copies in the program or printer driver. (Program and printer-driver settings override control-panel settings.)
DEFAULT PAPER SIZE	Displays a list of available media sizes.	Sets the default image size for paper and envelopes. This setting applies to the print jobs that do not have a paper size specified in the program or printer driver. The default setting is **LETTER**.
DEFAULT CUSTOM PAPER SIZE	**UNIT OF MEASURE** **X DIMENSION** **Y DIMENSION**	Sets the default custom paper size for tray 1. This menu appears only if the media-size switch in the selected tray is set to **CUSTOM**. **UNIT OF MEASURE**: Use this option to select the unit of measure (**INCHES** or **MILLIMETERS**) to use when you set customer paper sizes for the tray 1. **X DIMENSION**: Use this item to set the measurement of the width of the paper (measurement from side to side in the tray). The options are **3.0 to 12.28 INCHES** or **76 to 312 MM**. **Y DIMENSION**: Use this item to set the measurement of the length of the paper (measurement from front to back in the tray). The options are **5.0 to 18.50 INCHES** or **127 to 470 MM**.
OVERRIDE A4/LETTER	**NO** **YES**	Allows the printer to print an A4-size job on letter-size paper if A4-size paper is not loaded in the printer (or vice versa). The default setting is **YES**.
MANUAL FEED	**OFF** **ON**	Feeds the paper manually from tray 1, rather than automatically from a tray. If **MANUAL FEED=ON** and tray 1 is empty, the printer goes offline when it receives a print job. **MANUALLY FEED [PAPER SIZE]** appears on the printer control-panel display. The default setting is **OFF**.
COURIER FONT	**REGULAR**	Selects the version of Courier font to use:

Item	Values	Explanation
	DARK	**REGULAR**: The internal Courier font that is available on the HP LaserJet 4 series printers. **DARK**: The internal Courier font that is available on the HP LaserJet III series printers. The default setting is **REGULAR**.
WIDE A4	**NO** **YES**	Changes the number of characters that can be printed on a single line of A4-size paper. **NO**: Up to 78 10-pitch characters can be printed on one line. **YES**: Up to 80 10-pitch characters can be printed on one line. The default setting is **NO**.
PRINT PS ERRORS	**OFF** **ON**	Determines whether a PS error page prints or not. **OFF**: PS error page never prints. **ON**: PS error page prints when PS errors occur. The default setting is **OFF**.
PRINT PDF ERRORS	**OFF** **ON**	Determines whether a PDF error page prints or not. **OFF**: PDF error page never prints. **ON**: PDF error page prints when PDF errors occur. The default setting is **OFF**.
PCL SUBMENU	**FORM LENGTH** **ORIENTATION** **FONT SOURCE** **FONT NUMBER** **FONT PITCH** **SYMBOL SET** **APPEND CR TO LF** **SUPPRESS BLANK PAGES** **MEDIA SOURCE MAPPING**	**FORM LENGTH**: Sets vertical spacing from 5 to 128 lines for default paper size. **ORIENTATION**: Allows you to select default page orientation as **LANDSCAPE** or **PORTRAIT**. **NOTE** It is best to set the page orientation in the program or printer driver. (Program and printer-driver settings override control-panel settings.) **FONT SOURCE**: Allows you to select the font source. **FONT NUMBER**: The printer assigns a number to each font and lists the numbers on the PCL Font List. The font number appears in the Font # column of the printout. The range is 0 to 999. **FONT PITCH**: Selects the font pitch. This item might not appear, depending on the font selected. The range is 0.44 to 99.99. **SYMBOL SET**: Selects any one of several available symbol sets at the printer control panel. A symbol set is a unique grouping of all the characters in a font. PC-8 or PC-850 is recommended for line-draw characters. **APPEND CR TO LF**: Select **YES** to append a carriage return to each line feed that the printer encountered in backward-compatible PCL jobs (pure text, no job control). Some

Item	Values	Explanation
		environments, such as UNIX, indicate a new line using only the line feed control code. Use this option to append the required carriage return to each line feed. **SUPPRESS BLANK PAGES**: When generating your own PCL, extra form feeds are included that would cause one or more blank pages to be printed. Select **YES** for form feeds to be ignored if the page is blank. **MEDIA SOURCE MAPPING**: Allows you to select and maintain trays by number when you are not using the printer driver or when the software program has no option for tray selection. **CLASSIC**: Tray numbering is based on LaserJet 4 and older models. **STANDARD**: Tray numbering is based on newer LaserJet models.

Print Quality submenu

Some items on this menu are available in the program or printer driver (if the appropriate driver is installed). Program and printer-driver settings override control-panel settings. For more information, see Printer drivers. In general, it is best to change these settings in the printer driver, if applicable.

Item	Values	Explanation
SET REGISTRATION	**PRINT TEST PAGE** **SOURCE** **ADJUST TRAY [N]**	Shifts the margin alignment to center the image on the page from top to bottom, and left to right. You can also align the image that is printed on the front with the image that is printed on the back. Allows for one-sided and two-sided printing alignment. **PRINT TEST PAGE**: Prints a test page that shows the current registration settings. **SOURCE**: Selects the tray for which you want to print the test page. **ADJUST TRAY [N]**: Sets the registration for the specified tray, where [N] is the number of the tray. A selection appears for each tray that is installed, and registration must be set for each tray. • **X1 SHIFT**: Registration of the image on the paper from side to side, as the paper lies in the tray. For duplexing, this side is the second side (back) of the paper. • **X2 SHIFT**: Registration of the image on the paper from side to side, as the paper lies in the tray, for the first side (front) of a duplexed page. This item appears only if the printer includes a built-in duplexer and **DUPLEX** is **ON**. Set the **X1 SHIFT** first. • **Y SHIFT**: Registration of the image on the paper from top to bottom as the paper lies in the tray. The default setting for **SOURCE** is **TRAY 2**. The default setting for **ADJUST TRAY 1** and **ADJUST TRAY 2** is **0**.
FUSER MODES	List of available fuser modes	Configures the fuser mode associated with each media type.

Item	Values	Explanation
		Change the fuser mode only if you are experiencing problems printing on certain media types. After you select a type of media, you can select a fuser mode that is available for that type. The printer supports the following modes: **NORMAL**: Used for most types of paper. **HIGH 2**: Used for paper that has a special or rough finish. **HIGH 1**: Used for rough paper. **LOW3**: Used for transparencies. **LOW2**: Used for lightweight media. Use this mode if you are having problems with curled paper. **LOW1**: Use this mode if you are experiencing wrinkled media. The default fuser mode is **NORMAL** for all print media types except transparencies (**LOW3**) and rough paper (**HIGH1**). **CAUTION** Do not change the fuser mode for transparencies. Failure to use the **LOW3** setting while printing transparencies can result in permanent damage to the printer and fuser. Always select **Transparencies** as the type in the printer driver and set the tray type at the printer control panel to **TRANSPARENCY**. When selected, **RESTORE MODES** resets the fuser mode for each media type back to its default setting.
OPTIMIZE	List of parameters	Optimizes certain parameters for all jobs rather than (or in addition to) optimizing by paper type.
RESOLUTION	**300** **600** **FASTRES 600**	Selects the resolution. All values print at the same speed. **300**: Produces draft print quality and can be used for compatibility with the HP LaserJet III family of printers. **600**: Produces high print quality for text and can be used for compatibility with the HP LaserJet 4 family of printers. **FASTRES 600**: Produces 600-dpi print quality for fast, high-quality printing of business text and graphics. **NOTE** It is best to change the resolution in the program or printer driver. (Program and printer-driver settings override control-panel settings.) The default setting is **FASTRES 600**.
RET	**OFF** **LIGHT** **MEDIUM** **DARK**	Use the Resolution Enhancement technology (REt) setting to produce print with smooth angles, curves, and edges. REt does not affect print quality if the print resolution is set to FastRes 600. All other print resolutions benefit from REt.

Item	Values	Explanation
		NOTE It is best to change the REt setting in the program or printer driver. (Program and printer-driver settings override control-panel settings.) The default setting is **MEDIUM**.
ECONOMODE	**ON** **OFF**	Use EconoMode to use less toner per page. Selecting **ON** extends the life of the toner supply and reduces the cost per page. However, it also reduces print quality. The printed image is lighter, but it is adequate for printing drafts or proofs. **NOTE** It is best to turn EconoMode on or off in the program or printer driver. (Program and printer-driver settings override control-panel settings.) The default setting is **OFF**. **CAUTION** HP does not recommend full-time use of EconoMode. If EconoMode is used full-time, the toner supply might outlast the mechanical parts in the print cartridge.
TONER DENSITY	**1 to 5**	Lighten or darken the print on the page by setting the toner density. Select a setting ranging from **1** (light) to **5** (dark). The default setting of **3** usually produces the best results.
CREATE CLEANING PAGE	There is no value to select.	Press ✓ to print a cleaning page (for cleaning toner from the fuser). Follow the instructions on the cleaning page. For more information, see Cleaning the printer.
PROCESS CLEANING PAGE	There is no value to select.	This item is available only after a cleaning page has been created. Follow the instructions that are printed on the cleaning page. The cleaning process might take up to 2.5 minutes.

System Setup submenu

Items on this menu affect printer behavior. Configure the printer according to your printing needs.

Item	Values	Explanation
DATE/TIME	**DATE** **DATE FORMAT** **TIME** **TIME FORMAT**	Sets the date and time settings.
JOB STORAGE LIMIT	**1 to 100**	Specifies the number of quick copy jobs that can be stored on the printer. The default setting is **32**.
JOB HELD TIMEOUT	**OFF**	Sets the amount of time that held jobs are kept before being automatically deleted from the queue.

Item	Values	Explanation
	1 HOUR **4 HOURS** **1 DAY** **1 WEEK**	The default setting is **OFF**.
TRAY BEHAVIOR	**USE REQUESTED TRAY** **MANUALLY FEED PROMPT** **PS DEFER MEDIA** **SIZE/TYPE PROMPT**	**USE REQUESTED TRAY**: Determines whether the printer tries to pull media from a different tray than the one that you selected in the printer driver. • **EXCLUSIVELY**: Sets the printer to pull from the tray that you selected and not pull from another tray, even if the tray that you selected is empty. • **FIRST**: Sets the printer to pull from the tray that you selected first, but allows the printer to pull from another tray automatically if the tray that you selected is empty. **MANUALLY FEED PROMPT**: Determines when the printer shows a prompt regarding pulling from tray 1 if your print job does not match the type or size that is loaded in any other tray. • **ALWAYS**: Select this option if you always want to be prompted before the printer pulls from tray 1. • **UNLESS LOADED**: Prompts you only if tray 1 is empty. **PS DEFER MEDIA**: Controls whether the PostScript (PS) or HP paper-handling model is used to print jobs. **ENABLED** causes PS to defer to the HP paper-handling model. **DISABLED** uses the PS paper-handling model. **SIZE/TYPE PROMPT**: Use this menu item to control whether the tray configuration message and its prompts are shown whenever a tray is opened and closed. These prompts instruct you to set the type or size if the tray is configured for a type or size other than the type or size that is loaded in the tray.
SLEEP DELAY	**1 MINUTE** **15 MINUTES** **30 MINUTES** 45 MINUTES **60 MINUTES** **90 MINUTES** **2 HOURS** **4 HOURS**	Sets how long the printer remains idle before it enters Sleep mode. Sleep mode does the following: • Minimizes the amount of power that the printer consumes when it is idle. • Reduces wear on electronic components in the printer (turns off the display backlight, but the display is still readable). The printer automatically comes out of Sleep mode when you send a print job, press a printer control-panel button, open a tray, or open the top cover. The default setting is **30 MINUTES**.
WAKE TIME	**MONDAY** **TUESDAY**	Sets a “wake-up” time for the printer to warm up and calibrate each day. The default for each day is **OFF**. If you set a wake time, HP recommends setting an extended sleep

Item	Values	Explanation
	WEDNESDAY **THURSDAY** **FRIDAY** **SATURDAY** **SUNDAY**	delay time period, so that the printer will not return to sleep mode soon after waking.
PERSONALITY	**AUTO** **PDF** **PS** **PCL**	Selects the default printer language (personality). The possible values are determined by which valid languages are installed in the printer. Normally, you should not change the printer language. If you change it to a specific printer language, the printer will not switch automatically from one language to another unless specific software commands are sent to the printer. The default setting is **AUTO**.
CLEARABLE WARNINGS	**JOB** **ON**	Sets the amount of time that a clearable warning appears on the printer control-panel display. **JOB**: The clearable warning message appears until the end of the job that generated the message. **ON**: The clearable warning message appears until you press ✓. The default setting is **JOB**.
AUTO CONTINUE	**OFF** **ON**	Determines how the printer reacts to errors. **ON**: If an error occurs that prevents printing, the message appears on the printer control-panel display, and the printer goes offline for 10 seconds before returning online. **OFF**: If an error occurs that prevents printing, the message remains on the printer control-panel display, and the printer remains offline until you press ✓. The default setting is **ON**.
CARTRIDGE LOW	**STOP** **CONTINUE**	Determines how the printer behaves if the print cartridge is low. Print quality is not guaranteed if you print after receiving this message. **STOP**: The printer pauses printing until you replace the print cartridge or press ✓ each time you turn the printer on. The message appears until you replace the print cartridge. **CONTINUE**: The printer continues to print, and the message appears until you replace the print cartridge. The default setting is **CONTINUE**.
CARTRIDGE OUT	**STOP** **CONTINUE**	Determines how the printer reacts if the print cartridge is empty. **STOP**: The printer stops printing until you replace the print cartridge.

Item	Values	Explanation
		CONTINUE: The printer continues to print, and the **REPLACE CARTRIDGE** message appears until you replace the print cartridge. HP does not guarantee print quality if you select **CONTINUE** after a **REPLACE CARTRIDGE** condition. Replace the print cartridge as soon as possible to ensure good print quality. If the end of drum life is reached, the printer stops, regardless of the **CARTRIDGE OUT** setting. The default setting is **CONTINUE**.
JAM RECOVERY	**AUTO** **OFF** **ON**	Determines how the printer behaves if a jam occurs. **AUTO**: The printer automatically selects the best mode for printer jam recovery (usually **ON**). **OFF**: The printer does not reprint pages following a jam. Printing performance might be increased with this setting. **ON**: The printer automatically reprints pages after a jam is cleared. The default setting is **AUTO**.
RAM DISK	**AUTO** **OFF**	Determines how the RAM disk is configured. **AUTO**: Allows the printer to determine the optimal RAM-disk size based on the amount of available memory. **OFF**: The RAM is disabled. **NOTE** If you change the setting from **OFF** to **AUTO**, the printer automatically reinitializes when it becomes idle. The default setting is **AUTO**.
LANGUAGE	**ENGLISH** **Several**	Selects the language for the messages that appear on the printer control-panel display. The default setting is **ENGLISH**.

I/O submenu

Items on the I/O (input/output) menu affect the communication between the printer and the computer.

Item	Values	Explanation
I/O TIMEOUT	**5 to 300**	Select the I/O timeout period in seconds. Use this setting to adjust timeout for the best performance. If data from other ports appears in the middle of your print job, increase the timeout value. The default setting is **15**.
PARALLEL INPUT	**HIGH SPEED** **ADVANCED FUNCTIONS**	**HIGH SPEED**: Select **YES** to enable the printer to accept the faster parallel communications that are used for connections with newer computers. **ADVANCED FUNCTIONS**: Turn the bidirectional parallel communication on or off. The default is set for a bidirectional parallel port (IEEE-1284). The printer uses this setting to send status messages to the computer. Turning the parallel advanced functions on might slow language switching.

Resets submenu

Items on the Resets submenu relate to returning settings to the defaults and changing settings such as Sleep mode.

Item	Values	Explanation
RESTORE FACTORY SETTINGS	There is no value to select.	Performs a simple reset and restores most of the factory (default) settings. This item also clears the input buffer for the active I/O. **CAUTION** Restoring memory during a print job cancels the print job.
SLEEP MODE	**ON** **OFF**	Turns Sleep mode on or off. Using Sleep mode offers the following advantages: • Minimizes the amount of power that the printer consumes when it is idle • Reduces wear on electronic components in the printer (turns off the display backlight, but the display is still readable) The printer automatically comes out of Sleep mode when you send a print job, press a printer control panel button, open a tray, or open the top cover. You can set how long the printer remains idle before it enters Sleep mode. The default setting is **ON**.

Diagnostics menu

Administrators can use this submenu to isolate parts and to troubleshoot jam and print-quality issues.

Item	Values	Explanation
PRINT EVENT LOG	There is no value to select.	Press ✓ to generate a list of the 50 most recent entries in the event log. The printed event log shows error number, page count, error code, and description or personality.
SHOW EVENT LOG	There is no value to select.	Press ✓ to scroll through the contents of the event log at the printer control panel, which lists up to the 50 most recent events. Use ▲ or ▼ to scroll through the event log contents.
PAPER PATH TEST	**PRINT TEST PAGE** **SOURCE** **COPIES**	Generates a test page that is useful for testing the paper-handling features of the printer. **PRINT TEST PAGE**: Press ✓ to start the paper-path test using the source (tray), destination (output bin), duplex, and number of copies settings that you set in the other items on the Paper Path Test menu. Set the other items before selecting **PRINT TEST PAGE**. **SOURCE**: Select the tray that uses the paper path that you want to test. You can select any tray that is installed. Select **ALL TRAYS** to test all paper paths. (Paper must be loaded in the selected trays.) **COPIES**: Set how many sheets of paper are used from each tray during the paper-path test.

Service menu

The **SERVICE** menu is locked and requires a PIN for access. This menu is intended for use by authorized service personnel.

Changing printer-control-panel configuration settings

By using the printer control panel, you can make changes to general printer configuration default settings such as tray size and type, sleep delay, printer personality (language), and jam recovery.

CAUTION Configuration settings seldom need to be changed. Hewlett-Packard Company recommends that only the system administrator change configuration settings.

Changing control-panel settings

For a complete list of menu items and possible values, see Using the control-panel menus.

To change a control-panel setting

1. Press Menu to open the menus.
2. Use ▲ or ▼ to scroll to the menu that you want, and then press ✓.
3. Some menus might have several submenus. Use ▲ or ▼ to scroll to the submenu item that you want, and then press ✓.
4. Use ▲ or ▼ to scroll to the setting, and then press ✓.
5. Use ▲ or ▼ to change the setting. Some settings change rapidly if ▲ or ▼ is held down.
6. Press ✓ to save the setting. An asterisk (*) appears next to the selection on the display, indicating that it is now the default.
7. Press Menu to exit the menu.

NOTE Printer-driver settings override control-panel settings. Software program settings override both printer-driver settings and control-panel settings. If you cannot gain access to a menu or item, it is either not an option for the printer or you have not turned on the associated higher-level option. See your administrator if a function has been locked (**Access denied menus locked** appears on the printer control-panel display).

Tray-behavior options

Four user-defined options are available for tray behavior:

- **USE REQUESTED TRAY**. Selecting **EXCLUSIVELY** ensures that the printer does not automatically select another tray when you indicate that a specific tray should be used. Selecting **FIRST** allows the printer to pull from a second tray if the specified tray is empty. **EXCLUSIVELY** is the default setting.
- **MANUALLY FEED PROMPT**. If you select **ALWAYS** (the default value), the system always shows a prompt before pulling from the multipurpose tray. If you select **UNLESS LOADED**, the system displays the prompt only if the multipurpose tray is empty.
- **PS DEFER MEDIA**. This setting affects how non-HP PostScript drivers behave with the printer. You do not need to change this setting if you use the drivers that HP supplies. If set to **ENABLED**, non-HP PostScript drivers use the same HP tray selection method as the

HP drivers. If set to **DISABLED**, some non-HP PostScript drivers use the PostScript tray selection method instead of the HP method.

- **SIZE/TYPE PROMPT**. Use this item to control whether the tray configuration message and its corresponding prompts are shown whenever a tray is opened and closed. These prompts instruct you to change the type or size if the tray is configured for a different type or size than is loaded in the tray.

To set Use Requested Tray

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **TRAY BEHAVIOR**, and then press ✓.
5. Press ✓ to select **USE REQUESTED TRAY**.
6. Press ▲ or ▼ to select **EXCLUSIVELY** or **FIRST**, and then press ✓.
7. Press Menu to exit the menu.

To set Manually Feed Prompt

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **TRAY BEHAVIOR**, and then press ✓.
5. Press ▼ to highlight **MANUALLY FEED PROMPT**, and then press ✓.
6. Press ▲ or ▼ to select **ALWAYS** or **UNLESS LOADED**, and then press ✓.
7. Press Menu to exit the menu.

To set the printer default for PS Defer Media

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **TRAY BEHAVIOR**, and then press ✓.
5. Press ✓ to select **PS DEFER MEDIA**.
6. Press ▲ or ▼ to select **ENABLED** or **DISABLED**, and then press ✓.
7. Press Menu to exit the menu.

To set size/type prompt

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **TRAY BEHAVIOR**, and then press ✓.
5. Press ✓ to select **SIZE/TYPE PROMPT**.
6. Press ▲ or ▼ to select **DISPLAY** or **DO NOT DISPLAY**, and then press ✓.
7. Press Menu to exit the menu.

Sleep Delay

The adjustable Sleep Delay feature reduces power consumption when the printer has been inactive for an extended period. Use this menu item to set the length of time before the printer goes into Sleep mode. The default setting is **30 MINUTES**.

NOTE The printer control-panel display dims when the printer is in Sleep mode. Sleep mode does not affect printer warm-up time unless the printer was in Sleep mode for more than 8 hours.

To set the Sleep Delay

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **SLEEP DELAY**, and then press ✓.
5. Press ▲ or ▼ to select the appropriate time period, and then press ✓.
6. Press Menu to exit the menu.

To turn the Sleep mode on or off

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **RESETS**, and then press ✓.
4. Press ▼ to highlight **SLEEP MODE**, and then press ✓.
5. Press ▲ or ▼ to select **ON** or **OFF**, and then press ✓.
6. Press Menu to exit the menu.

Personality

This printer features automatic personality (printer-language) switching.

- **AUTO**: Configures the printer to automatically detect the type of print job and configure its personality to accommodate that job.
- **PCL**: Configures the printer to use Printer Control Language.
- **PDF**: Configures the printer to use portable document format.
- **PS**: Configures the printer to use PostScript emulation.

To set the personality

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **PERSONALITY**, and then press ✓.
5. Press ▲ or ▼ to select the appropriate personality, and then press ✓.
6. Press Menu to exit the menu.

Clearable warnings

Use this feature to determine the display time of control-panel clearable warnings by selecting **ON** or **JOB**. The default value is **JOB**.

- **ON**: Clearable warnings appear until you press ✓.
- **JOB**: Clearable warnings appear until the end of the job for which they were generated.

To set the clearable warnings

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **CLEARABLE WARNINGS**, and then press ✓.
5. Press ▲ or ▼ to select the appropriate setting, and then press ✓.
6. Press Menu to exit the menu.

Auto continue

You can determine printer behavior when the system generates an auto-continuable error. **ON** is the default setting.

- Select **ON** if you want an error message to appear for 10 seconds before the printer automatically continues to print.
- Select **OFF** to pause printing any time an error message appears and until you press ✓.

To set auto continue

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **AUTO CONTINUE**, and then press ✓.
5. Press ▲ or ▼ to select the appropriate setting, and then press ✓.
6. Press Menu to exit the menu.

Cartridge low

The printer has two options for reporting that print-cartridge life is low: **CONTINUE** is the default value.

- Select **CONTINUE** to allow the printer to continue printing while a warning appears and until the print cartridge is replaced.
- Select **STOP** if you want the printer to pause printing until you replace the used print cartridge or press ✓, which allows the printer to print while the warning appears.

To set supplies-low reporting

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **CARTRIDGE LOW**, and then press ✓.
5. Press ▲ or ▼ to select the appropriate setting, and then press ✓.
6. Press Menu to exit the menu.

Cartridge-out response

The printer has two options for this menu item.

- Select **CONTINUE** to allow the printer to continue printing. A **REPLACE CARTRIDGE** warning message appears until the print cartridge is replaced. Printing in this mode can continue only for a specific number of pages. After that, the printer stops printing until you replace the empty print cartridge. This is the default setting.
- Select **STOP** if you want the printer to stop printing until the empty print cartridge is replaced.

To set the cartridge-out response

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **CARTRIDGE OUT**, and then press ✓.

5. Press ▲ or ▼ to select the appropriate setting, and then press ✓.
6. Press Menu to exit the menu.

Jam recovery

Use this option to configure the printer response to jams, including how the printer handles the pages involved. **AUTO** is the default value.

- **AUTO**: The printer automatically turns jam recovery on when sufficient memory is available.
- **ON**: The printer reprints any page that is involved in a jam. Additional memory is allocated to store the last few pages that were printed, and this might cause overall printer performance to suffer.
- **OFF**: The printer does not reprint any page that was involved in a jam. Because no memory is used to store the most recent pages, overall printer performance might be optimized.

To set the jam-recovery response

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **JAM RECOVERY**, and then press ✓.
5. Press ▲ or ▼ to select the appropriate setting, and then press ✓.
6. Press Menu to exit the menu.

RAM disk

This option determines how the RAM disk feature is configured. This option is available only if the printer has at least 8 MB of free memory. The default is **AUTO**.

- **AUTO**: The printer determines the optimal RAM disk size based on the amount of available memory.
- **OFF**: The RAM disk is disabled, but a minimal RAM disk is still active (sufficient to scan one page).

To set the RAM disk

1. Press Menu to open the menus.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **RAM DISK**, and then press ✓.
5. Press ▲ or ▼ to select the appropriate setting, and then press ✓.
6. Press Menu to exit the menu.

Language

If **LANGUAGE** appears in English on the control panel, use the following procedure. Otherwise, turn the printer off and then on again. When **XXX MB** appears, press and hold ✓. When all three control panel lights are lit, release ✓ and use the following procedure to set the language.

Selecting the language during initial installation

1. Turn on the printer.
2. When **LANGUAGE** appears on the control-panel display in the default language, press ▼ to highlight the preferred language, and then press ✓.

Changing the language after the initial configuration

After the initial installation, you can change the control-panel display language from the control panel.

1. Press Menu.
2. Use ▼ to highlight **CONFIGURE DEVICE**, and then press ✓
3. Use ▼ to highlight **SYSTEM SETUP**, and then press ✓
4. Use ▼ to highlight **LANGUAGE**, and then press ✓
5. Use ▼ or ▲ to highlight the appropriate language, and then press ✓.
6. Press Menu to exit the menu.

3 Input/output (I/O) configuration

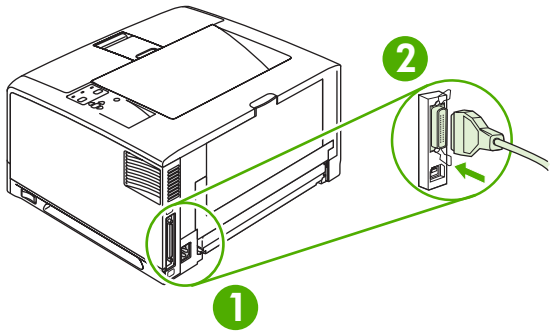
This chapter describes how to configure certain parameters on the printer:

- Parallel configuration
- USB configuration

Parallel configuration

A parallel connection is made by connecting the printer to the computer using a bidirectional parallel cable (IEEE-1284 compliant) with a connector plugged into the printer parallel port. The cable can be a maximum of 10 meters (30 feet) long.

When used to describe a parallel interface, the term bidirectional indicates that the printer is able to both receive data from the computer and send data to the computer through the parallel port. While the parallel interface provides backwards compatibility, a USB connection is recommended to optimize performance.



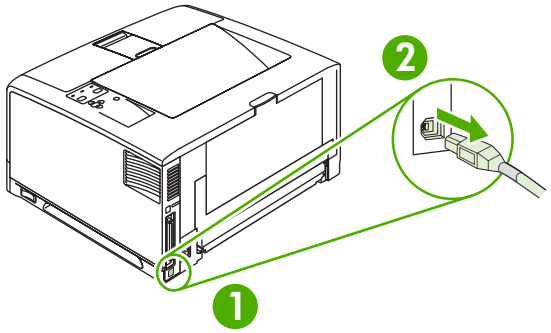
1	Parallel port
2	Parallel connector

USB configuration

The printer supports a Hi-Speed USB 2.0 port. The USB cable can be a maximum of 5 meters (15 feet) long.

Connecting the USB cable

Plug the USB cable into the printer. Plug the other end of the USB cable into the computer.



1	USB port
2	USB connector

4 Printing tasks

This chapter describes how to perform basic printing tasks:

- Controlling print jobs
- Using print media
- Configuring output bins
- Configuring trays
- Printing on special media
- Printing and paper storage environment
- Printing on both sides (duplexing)
- Using features in the Windows printer driver
- Using features in the Macintosh printer driver
- Managing special printing situations
- Managing stored jobs
- Managing memory

Controlling print jobs

In Windows, three settings affect how the printer driver pulls media when you send a print job. The **Source**, **Type**, and **Size** settings appear in the **Page Setup**, **Print**, or **Print Properties** dialog boxes in most software programs. If you do not change these settings, the printer automatically uses the default printer settings to select a tray.

CAUTION Make printer setup changes through the software program or the printer driver whenever possible, because changes that you make at the control panel become default settings for subsequent print jobs. Settings selected in the software or the printer driver override control-panel settings.

Source

Print by **Source** to specify a tray from which the printer will pull media. The printer tries to print from this tray, no matter what type or size is loaded in it. If you select a tray that is configured for a type or size that does not match your print job, the job does not proceed until you load the tray with the correct type or size. If you load the tray correctly, the printer begins printing. If you press ✓, you can select another tray.

NOTE If you have difficulties printing by **Source**, see Priority for print settings.

Type and Size

Print by **Type** or **Size** when you want to pull media from the first tray that is loaded with the type or size that you select. Selecting media by type rather than source is similar to locking out trays and helps protect special media from accidental use. For example, if a tray is configured for letterhead, and you specify that the driver print on plain paper, the printer will not pull media from that tray, but will pull paper from a tray that has plain paper loaded and is configured for plain paper.

NOTE Selecting the **Any** setting negates the tray lock-out function.

Selecting media by type and size results in significantly better print quality for heavy paper, glossy paper, and overhead transparencies. Using the wrong setting can result in unsatisfactory print quality. Always print by **Type** for special print media, such as labels or transparencies. Always print by **Size** for envelopes.

- If you want to print by **Type** or **Size** and the trays have not been configured for a certain type or size, load the media into tray 1. Then, in the printer driver, select the **Type** or **Size** in the **Page Setup**, **Print**, or **Print Properties** dialog box.
- If you often print on a certain type or size of media, you can configure a tray for that type or size. Then, when you select that type or size as you print a job, the printer pulls from the tray configured for that type or size.
- When you close tray 2, a message might appear prompting you to select a **Type** or **Size** for the tray. If the tray is already configured correctly, press ⮌ to return to the **Ready** state.

NOTE If all of the tray type settings are set to **ANY**, and if you do not select a specific tray (source) in the printer driver, the printer pulls media from the lowest tray. For example, tray 2 is loaded, the printer pulls media from that tray first. However, if the tray 1 size and type settings are set to **ANY** and if media is loaded in the tray, then the printer prints from tray 1 first. If tray 1 is closed, the printer prints from tray 2.

Priority for print settings

Changes to print settings are prioritized depending on where the changes are made:

NOTE The names of commands and dialog boxes might vary depending on your software program.

- **Page Setup dialog box**: Click **Page Setup** or a similar command on the **File** menu of the program you are working in to open this dialog box. Settings changed here override settings changed anywhere else.
- **Print dialog box**: Click **Print**, **Print Setup**, or a similar command on the **File** menu of the program you are working in to open this dialog box. Settings changed in the **Print** dialog box have a lower priority and do *not* override changes made in the **Page Setup** dialog box.
- **Printer Properties dialog box (printer driver)**: Click **Properties** in the **Print** dialog box to open the printer driver. Settings changed in the **Printer Properties** dialog box do not override settings anywhere else in the printing software.
- **Default printer driver settings**: The default printer driver settings determine the settings used in all print jobs, *unless* settings are changed in the **Page Setup**, **Print**, or **Printer Properties** dialog boxes.
- **Printer control panel settings**: Settings changed at the printer control panel have a lower priority than changes made anywhere else.

Gaining access to printer driver settings

Operating System	Temporarily change settings for print jobs	Permanently change default settings[1]
Windows 98, 2000, Me, and XP	From the **File** menu, click **Print**. Select the printer, and then click **Properties**. (The steps can vary; this procedure is most common.)	Click **Start**, point to **Settings**, and then click **Printers** or **Printers and Faxes**. Right-click the printer icon and select **Printing Preferences**.
Macintosh OS X	On the **File** menu, click **Print**. Change settings on the various pop-up menus.	On the **File** menu, click **Print**. Change settings on the various pop-up menus, and then, on the main pop-up menu, click **Save Custom Settings** to save them as the **Custom** option. To use the new settings, you must select the **Custom** option every time you open a program and print.

[1] Because access to default printer settings can be restricted, the settings might be unavailable.

Using print media

Before purchasing any paper or specialized forms in quantity, verify that your paper supplier has obtained and understands the print-media requirements that are specified in the *HP LaserJet Printer Family Print Media Specification Guide*.

See HP Customer Care to order the *HP LaserJet Printer Family Print Media Specification Guide*. To download a copy of the guide, go to www.hp.com/support/lj5200l. Select **Manuals**.

It is possible that paper could meet all of the guidelines in this chapter or the *HP LaserJet Printer Family Print Media Specification Guide* and still not print satisfactorily. This can result from abnormal characteristics of the printing environment or other variables over which HP has no control (for example, extremes in temperature and humidity).

Hewlett-Packard Company recommends testing any paper before buying it in large quantities.

CAUTION Using paper that does not conform to the specifications listed here or in the print media guide can cause problems that require service. This service is not covered by the Hewlett-Packard warranty or service agreements.

Paper to avoid

The printer can handle many types of paper. Using paper that does not meet specifications will cause lower print quality and increase the chance of jams.

- Do not use paper that is too rough.
- Do not use paper, other than standard 3-hole punched paper, that contains cutouts or perforations.
- Do not use multipart forms.
- Do not use paper that has already been printed on, or that has been fed through a photocopier.
- Do not use paper that contains a watermark if you are printing solid patterns.

Paper that can damage the printer

In rare circumstances, paper can damage the printer. The following paper must be avoided to prevent possible damage to the printer:

- Do not use paper with staples attached, or paper from which staples were removed. Staples can damage the printer and could void the warranty.
- Do not use transparencies that are designed for Inkjet printers or other low temperature printers, or for monochrome printing. Use only transparencies that are specified for use with HP LaserJet printers.
- Do not use photo paper that is intended for Inkjet printers.
- Do not use paper that is embossed or coated, or any media that produces hazardous emissions, or that melts, misaligns, or discolors when exposed to 190°C (374°F) for 0.1 second. Also, do not use letterhead paper that is made with dyes or inks that cannot withstand that temperature.

To order HP LaserJet printing supplies, see Ordering parts, accessories, and supplies.

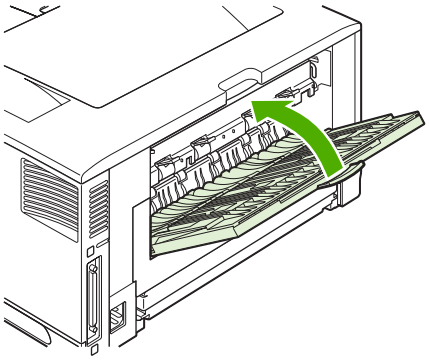
Configuring output bins

The printer has two output bins into which it places finished print jobs:

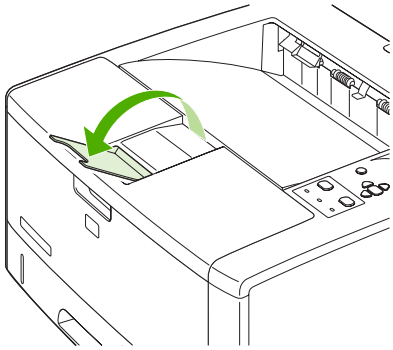
- Top (face-down) output bin: This it the default output bin at the top of the printer. Print jobs exit the printer face-down into this bin.
- Rear (face-up) output bin: Print jobs exit the printer face-up into this bin at the rear of the printer.

Printing to the top output bin

1. Make sure that the rear output bin is closed. If the rear output bin is open, the printer will deliver the print job to that bin.



2. If you are printing on long media, open the top output bin support.

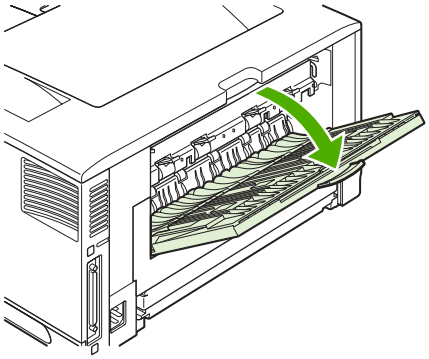


3. From your computer, send the print job to the printer.

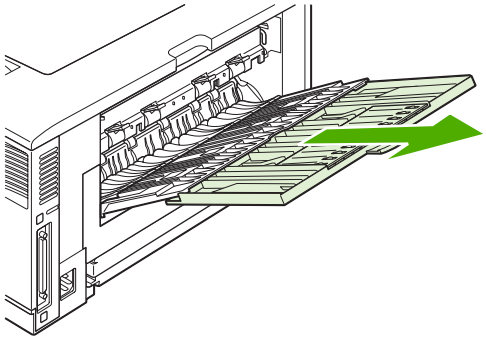
Printing to the rear output bin

NOTE When tray 1 and the rear output bin are used together, they provide a straight-through paper path for your print job. Using a straight-through paper path can reduce curling.

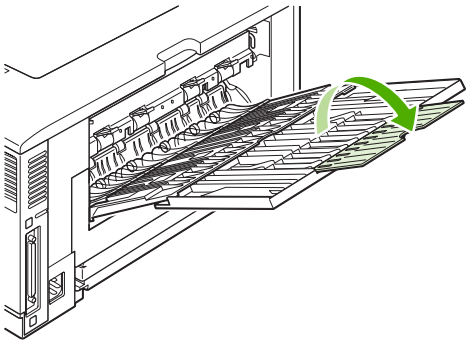
1. Open the rear output bin.



2. If you are printing on long media, pull out the bin extension.



3. Open the extension tray support.



4. From your computer, send the print job to the printer.

Configuring trays

Load special print media, such as envelopes, labels, and transparencies, in tray 1 only. Load only paper in tray 2.

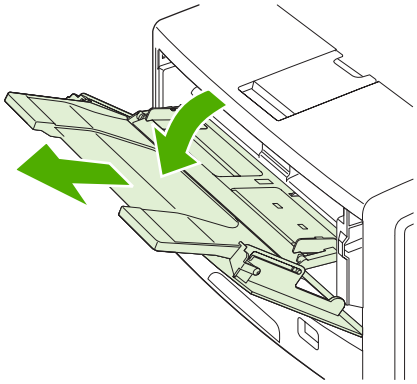
Loading tray 1 (multipurpose tray)

Tray 1 holds up to 100 sheets of paper, up to 75 transparencies, up to 50 sheets of labels, or up to 10 envelopes. See the following sections for information about printing on special media:

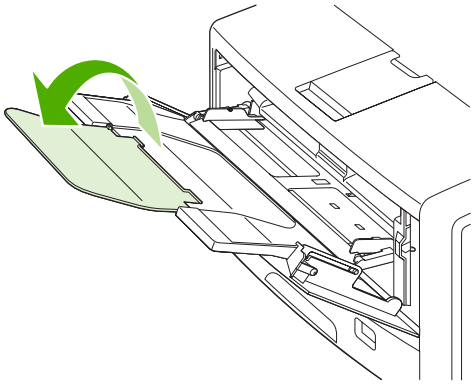
- Preprinted material—Printing on letterhead, prepunched, or preprinted paper (single-sided)
- Envelopes—Printing on envelopes
- Labels—Printing on labels

To load tray 1

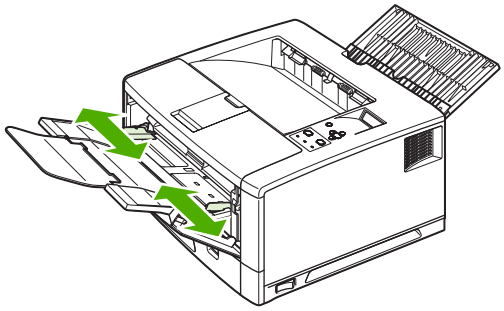
1. Open tray 1 by pulling the front cover down.



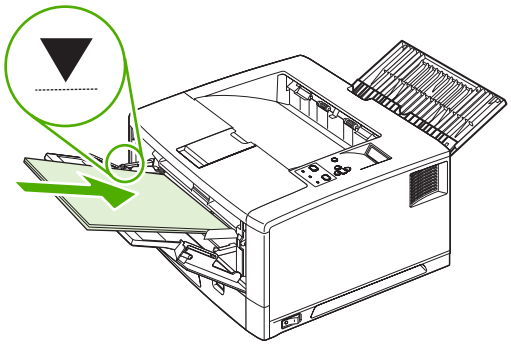
2. Slide out the plastic tray extender. If the media that is being loaded is longer than 229 mm (9 in), also flip open the additional tray extender.



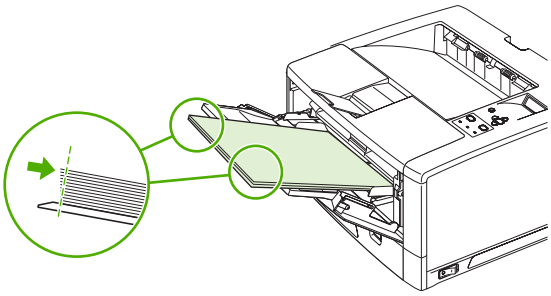
3. Slide the media-width guides slightly wider than the media.



4. Place media into the tray (short-edge in, print-side up). The media should be centered between the media-width guides and under the tabs on the media-width guides.



5. Slide the media-width guides inward until they lightly touch the media stack on both sides without bending it. Make sure that the media fits under the tabs on the media-width guides.



NOTE Do not add media to tray 1 while the printer is printing. This could cause a jam. Do not close the front door when the printer is printing.

Customizing tray 1 operation

The printer can be set to print from tray 1 if it is loaded, or to print only from tray 1 if the type of media that is loaded is specifically requested. See Paper Handling menu.

Setting	Explanation
TRAY 1 TYPE=ANY **TRAY 1 SIZE=ANY**	The printer usually pulls media from tray 1 first unless it is empty or closed. If you do not keep media in tray 1 all the time, or if you use tray 1 only to manually feed media, keep the default setting of **TRAY 1 TYPE=ANY** and **TRAY 1 SIZE=ANY** on the Paper Handling menu.
TRAY 1 TYPE= or **TRAY 1 SIZE=** a type other than **ANY**	The printer treats tray 1 like the other trays. Instead of looking for media in tray 1 first, the printer pulls media from the tray that matches type and size settings that are selected in the software. In the printer driver, you can select media from any tray (including tray 1) by type, size, or source. To print by type and size of paper, see Controlling print jobs.

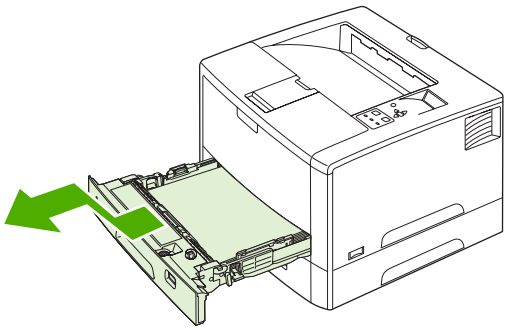
You can also determine whether the printer shows a prompt to ask if it can pull media from tray 1 if it cannot find the type and size that you requested in another tray. You can set the printer to always prompt you before pulling from tray 1 or only prompt you if tray 1 is empty. Set the **USE REQUESTED TRAY** setting on the **System Setup** submenu of the **Configure Device** menu.

Loading tray 2 (250-sheet tray)

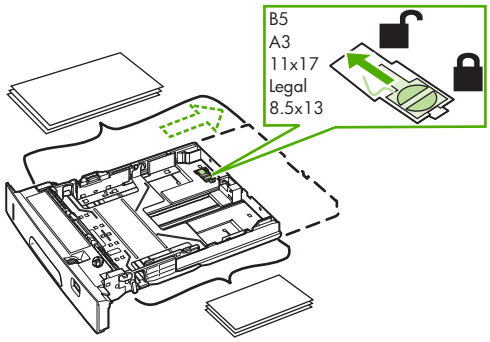
Tray 2 supports only paper. For supported paper sizes, see Paper specifications.

To load tray 2

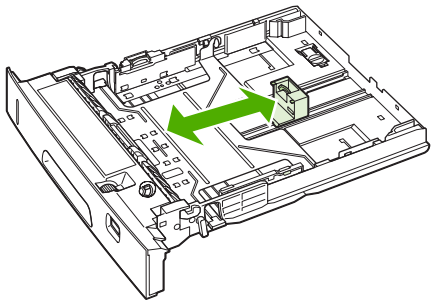
1. Pull the tray out of the printer and remove any paper.



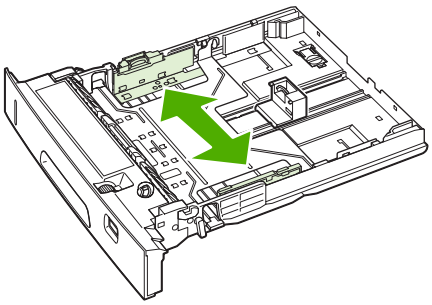
- If you are printing on longer media, slide the lock lever on the tray into the unlocked position, and then extend the rear section of the tray to fit the media that you are loading.



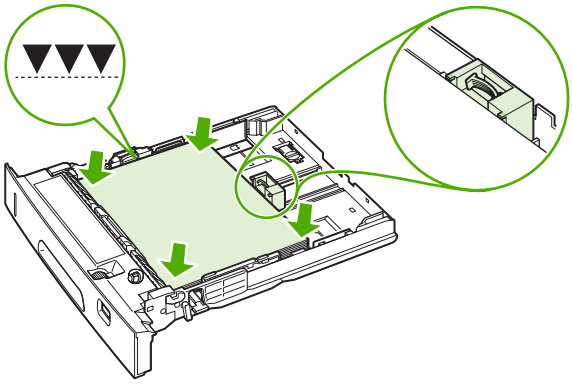
2. On the rear paper-length guide, press the tab and slide it so that the pointer matches the paper size that you are loading. Make sure that the guide clicks into place.



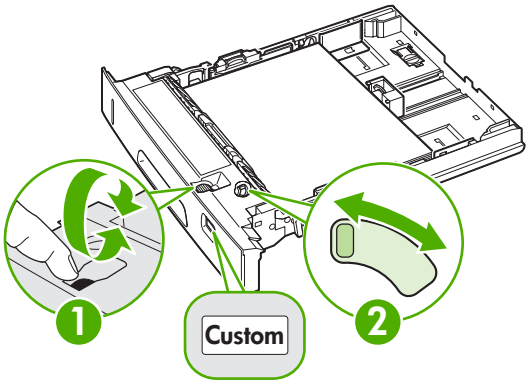
3. Adjust the side media-width guides outward so that the pointer matches the paper size that you are loading.



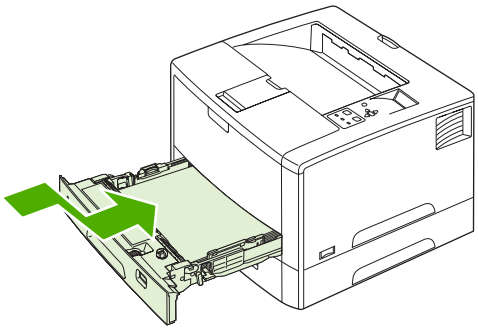
4. Place the paper in the tray and make sure that it is flat at all four corners. Keep the paper below the height tabs on the paper-length guide in the rear of the tray.



5. Set the paper-size dial (callout 1) and paper-size switch (callout 2) to the size of the paper that you loaded.



6. Slide the tray into the printer.



Printing on special media

Special media includes letterhead, prepunched (including 3-hole punched), envelopes, labels, transparencies, full-bleed images, rotated paper, index cards, postcards, custom-size, and heavy paper.

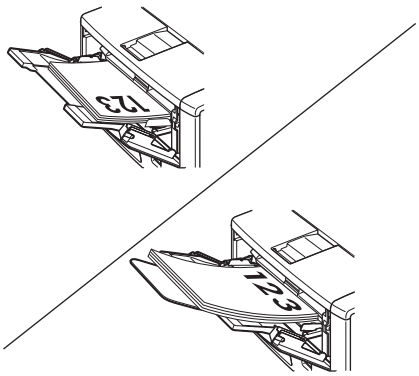
Printing on letterhead, prepunched, or preprinted paper (single-sided)

When printing letterhead, prepunched, or preprinted paper, it is important to orient the paper correctly. Follow the guidelines in this section for printing on one side only. For duplexing guidelines, see Printing on both sides (duplexing).

NOTE It might be necessary to print prepunched paper in a rotated orientation (see Printing on rotated media). Printing in portrait or landscape mode is usually selected from the software program or printer driver. If the option is not available, change the **ORIENTATION** setting on the printer control panel.

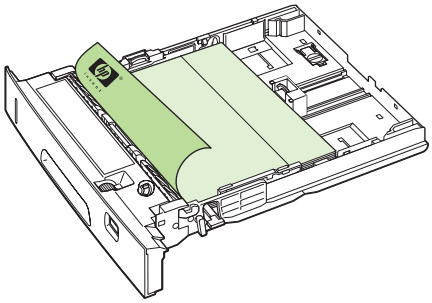
Tray 1 orientation

- **Letter, A4, A5, Executive, 8K, 16K, and custom sizes**: Load media with the side to be printed on facing up, and the top, short edge toward the right (landscape).
- **A3, B4, B5, 11 x 17, Legal, 8.5 x 13, and custom sizes**: Load media with the side to be printed on facing up, and the top, short edge toward the printer (portrait).



Tray 2 orientation

Load media with the side to be printed on facing down, and the top, short edge toward you.



Guidelines for printing on letterhead or preprinted forms

- Do not use letterhead paper that is printed with low-temperature inks, such as those used in some types of thermography.
- Do not use raised or embossed letterhead.
- The printer uses heat and pressure to fuse toner to the paper. Make sure that any colored paper or preprinted forms use inks that are compatible with this fusing temperature (200°C or 392°F for 0.1 second).

Printing on envelopes

You can print envelopes from tray 1. Tray 1 holds up to 10 envelopes and supports standard or custom sizes.

For printing on any size of envelope, make sure to set the margins in your program at least 15.0 mm (0.6 in) from the edge of the envelope.

To minimize curl and wrinkling, always print envelopes to the rear output bin.

The printer might print at a slower speed when printing envelopes. In addition, printing performance depends on the construction of the envelope. Always test a few sample envelopes before purchasing a large quantity. For envelope specifications, see Paper specifications.

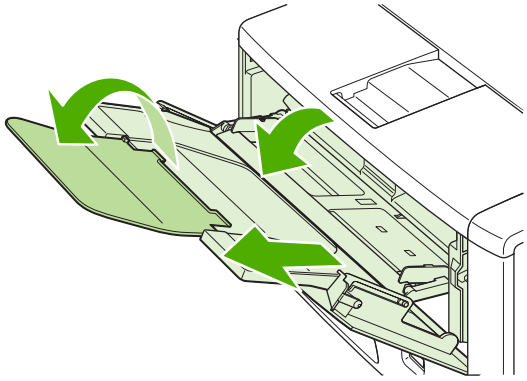
WARNING! Never use envelopes that contain coated linings, exposed self-stick adhesives, or other synthetic materials. These items can emit noxious fumes.

CAUTION Envelopes that have clasps, snaps, windows, coated linings, exposed self-stick adhesives, or other synthetic materials can severely damage the printer. To avoid jams and possible printer damage, never try to print on both sides of an envelope. Before you load envelopes, make sure that they are flat and not damaged or stuck together. Do not use envelopes that contain pressure-sensitive adhesive.

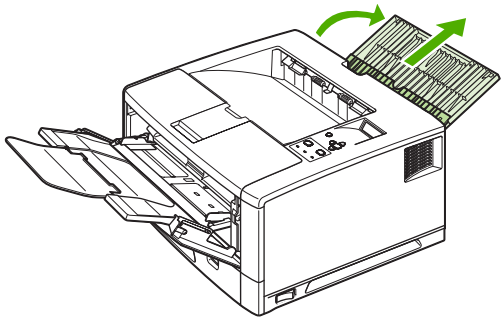
To load envelopes in tray 1

Many types of envelopes can be printed from tray 1. Up to 10 can be stacked in the tray.

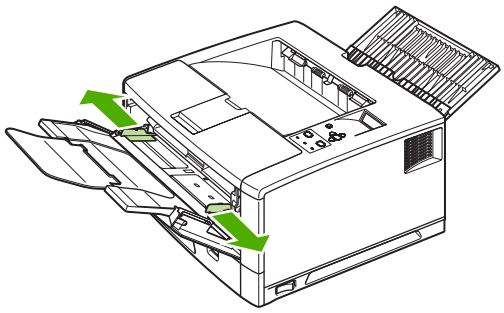
1. Open tray 1 and pull out the tray extension. If the envelopes are longer than 229 mm (9 in), flip open the smaller tray extension.



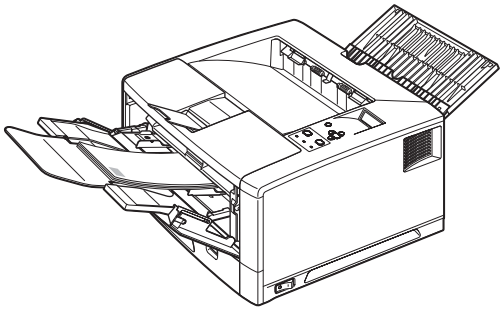
2. Open the rear output bin and pull out the tray extension. (This can reduce envelope curl and wrinkling.)



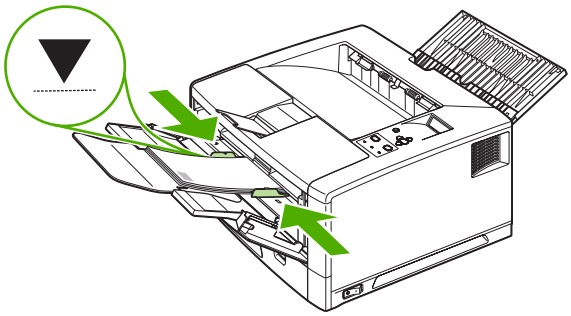
3. Slide the width guides on tray 1 outward to a position that is slightly wider than the envelopes.



4. Load as many as 10 envelopes in the center of tray 1 with the side to be printed on facing up, and the postage end pointed away from the printer. Slide the envelopes into the printer as far as they will go without forcing them.



5. Adjust the guides to touch the envelope stack without bending the envelopes. Make sure that the envelopes fit under the tabs on the guides.



Printing on labels

Use only labels that are recommended for laser printers. For label specifications, see Labels.

Guidelines for printing on labels

- Print labels from tray 1. Load them with the side to be printed on facing up and the top edge to the right.
- Use the rear output bin for labels.
- Remove label sheets from the output bin as they are printed to prevent them from sticking together.
- Do not use labels that are separating from the backing sheet or are wrinkled or damaged in any way.
- Do not use label sheets that have the backing sheet exposed, and do not reuse partially used label sheets.

- Do not feed a sheet of labels through the printer more than once. The adhesive backing is designed for one pass through the printer.
- Do not print on both sides of labels.

CAUTION Failure to follow these guidelines can damage the printer.

If a sheet of labels becomes jammed in the printer, see Clearing jams.

Printing on transparencies

Use only transparencies that are recommended for use in laser printers. For transparency specifications, see Transparencies.

Guidelines for printing on transparencies

- Print transparencies from tray 1. Load them with the side to be printed on facing up and the top edge to the right.
- Use the top output bin to reduce curling (this is for transparencies only; for other media use the rear output bin to reduce curling).
- Remove transparencies from the top output bin as they are printed to prevent them from sticking together.
- Place transparencies on a flat surface after removing them from the printer.
- In the print driver or software program, set the tray 1 type to **Transparency**.

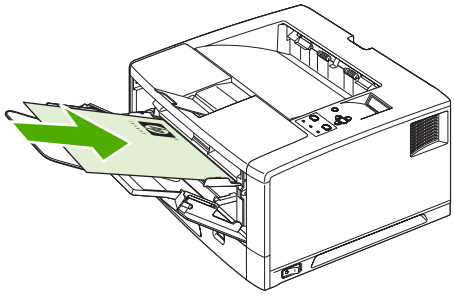
Printing on rotated media

The printer can print on letter, A4, A5, Executive, and B5 (JIS) print media in a rotated orientation (short-edge first) from tray 1. The printer can print on letter and A4 media in a rotated orientation from tray 2. Printing on rotated media is slower. Some types of media feed better when rotated, such as prepunched paper (especially when it is printed on both sides) or labels that do not stack flat.

Printing from tray 1

1. On the **PAPER HANDLING** menu on the printer control panel, select **TRAY 1 MODE=CASSETTE**.
2. On the **PAPER HANDLING** menu, select the appropriate tray 1 size.

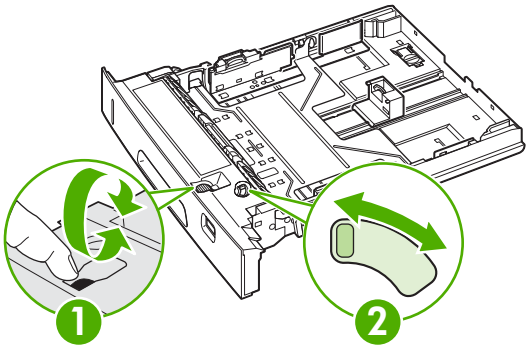
3. Load media with the side to be printed on facing up, and the top, short edge toward the printer.



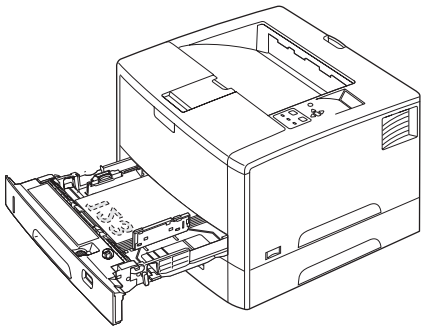
4. In the printer driver or software program, select the paper size as you normally would and select tray 1 as the media source.

Printing from tray 2

1. Set the paper-size dial (callout 1) and paper-size switch (callout 2) to the size of the paper that you are loading.



2. Load paper with the side-to-be printed on facing down, and the top, short-edge toward the front of the tray.



3. In the printer driver or software program, select the size and source of the rotated paper.

Printing full-bleed images

Full-bleed images extend from edge to edge of the page. To achieve this effect, use larger paper, then trim its edges to the desired size.

CAUTION Never print directly to the edge of paper. This causes toner to accumulate inside the printer, which may affect print quality and damage the printer. Print on paper up to 312 x 470 mm (12.28 x 18.5 in), leaving margins on all four sides of at least 2 mm (0.08 in).

NOTE When printing paper wider than 297 mm (11.7 in), always use the rear output bin.

Printing on custom-size media

Custom-size paper can be printed from any of the trays. For media specifications, see Paper specifications.

NOTE Very small or very large custom-size paper should be printed from tray 1 to the rear output bin. The printer control panel can be set for one custom size at a time. Do not load more than one size of custom paper into the printer.

When you print large numbers of small or narrow media and standard paper, for best printing performance print paper first, then the small or narrow media.

Guidelines for printing custom-size paper

- Do not attempt to print on paper smaller than 76 mm (3 in) wide or 127 mm (5 in) long.
- Set page margins at least 4.23 mm (0.17 in) away from the edges.

Setting custom paper sizes

When custom paper is loaded, size settings need to be selected from the software program (the preferred method), the printer driver, and the printer control panel.

NOTE All settings in the printer driver and software program (except configuring custom paper sizes) override control panel settings. (Software program settings override printer driver settings.)

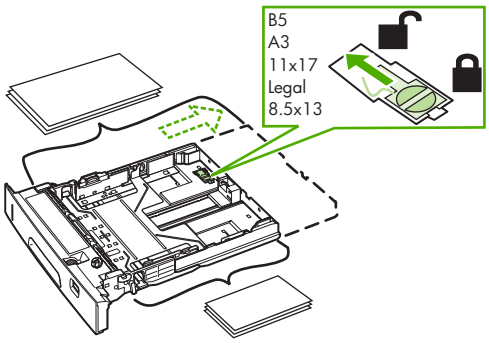
If the settings are not available from the software, set the custom paper size from the control panel:

1. On the **PRINTING** menu, set **DEFAULT PAPER SIZE=CUSTOM**.
2. On the **CUSTOM** menu, select inches or millimeters as the unit of measurement.
3. On the unit of measurement menu, set the X dimension (the long edge of the paper). The X dimension can be 76 to 312 mm (3 to 12.28 in) for tray 1 or 148 to 297 mm (8.2 to 11.7 in) for tray 2. Set the Y dimension (the short edge of the paper). The Y dimension can be 127 to 470 mm (5 to 18.5 in) for tray 1 or 210 to 432 mm (5.8 to 17 in) for tray 2.
4. If custom media is loaded into tray 1 and **TRAY 1 MODE=CASSETTE**, then set **TRAY 1 SIZE=CUSTOM** in the **PAPER HANDLING** menu on the printer control panel.
5. In the software, select **Custom** as the paper size.

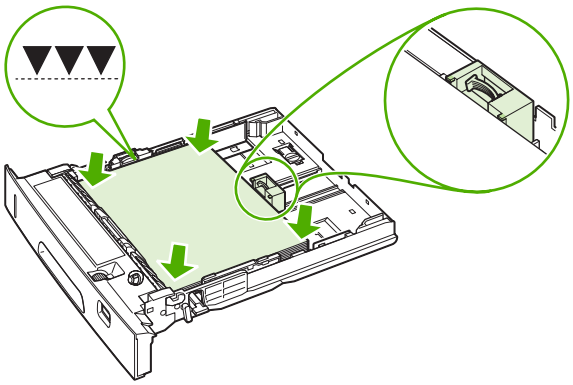
Loading custom-size media in tray 2

1. Pull the tray out of the printer and remove any media.

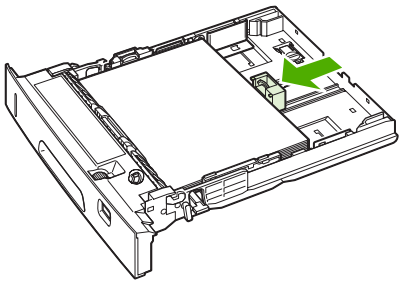
   - If you are printing on longer media from tray 2, slide the lock lever on the tray into the unlocked position, and then extend the rear section of the tray to fit the media that you are loading.



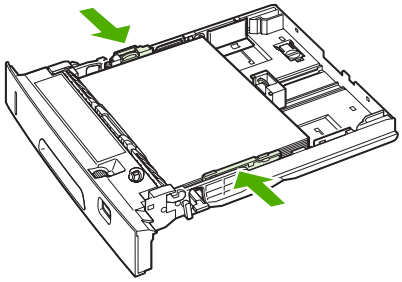
2. Place the media in the tray and make sure that it is flat at all four corners. Keep the stack below the height tabs on the paper-length guide in the rear of the tray.



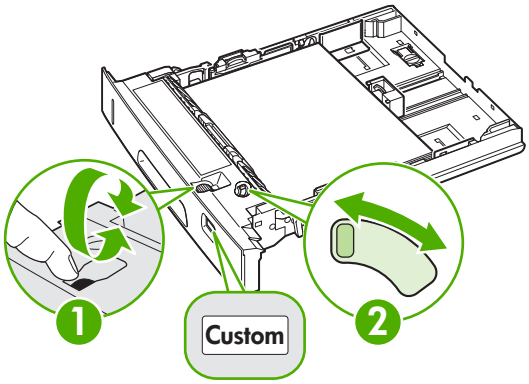
3. On the rear paper-length guide, press the tab and slide it up against the edge of the stack.



4. Slide the side media-width guides up against the edge of the stack.



5. Set the paper-size dial (callout 1) and paper-size switch (callout 2) to **Custom**.

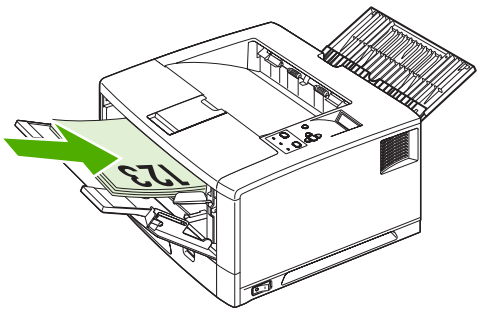


6. Slide the tray into the printer.

Printing on vellum

Vellum is special lightweight paper similar to parchment. Print vellum from tray 1 only, and open the rear output bin. Do not print on both sides of vellum.

1. Load vellum with the side to be printed on facing up and the top, short edge to the right.



2. Open the rear output bin.

3. At the control panel, on the **PAPER HANDLING** menu, set **TRAY 1 MODE=CASSETTE**.
4. From the printer driver, set the type of paper for tray 1 to vellum, and select the media by type. For more information, see Type and Size.

Printing on glossy paper

- In either the software program or the driver, select **Glossy** as the media type, or print from a tray that is configured for glossy paper.
    - Select **Glossy** for media weights up to 120 g/m^2 (32-lb bond). Select **Heavy Glossy** for media weights up to 163 g/m^2 (43-lb bond). Select **Extra Heavy Glossy** for media weights up to 220 g/m^2 (58-lb bond).
- Because this affects all print jobs, it is important to return the printer to its original settings once the job has printed.

Colored paper

- Colored paper should be of the same high quality as white xerographic paper.
- Pigments used must be able to withstand the printer's fusing temperature of 190°C (374°F) for 0.1 second without deterioration.
- Do not use paper that has a colored coating that was added after the paper was produced.

Heavy paper

- Any tray will print most heavy media that does not exceed 120 g/m^2 (32-lb bond).
- Use cardstock (135 to 220 g/m^2 (36- to 58-lb bond)) only in tray 1.
- In either the software program or the printer driver, select **Heavy** (106 to 163 g/m^2 (28- to 43-lb bond)) or **Cardstock** (135 to 220 g/m^2 (36- to 58-lb bond)) as the media type, or print from a tray that is configured for heavy paper. Because this setting affects all print jobs, it is important to return the printer to its original settings after the job has printed.

CAUTION In general, do not use paper that is heavier than the media specification recommended for this printer. Doing so can cause misfeeds, jams, reduced print quality, and excessive mechanical wear. However, some heavier media, such as HP Cover Stock, can be used safely.

HP LaserJet Tough paper

- Use only HP LaserJet Tough paper with this printer. HP products are designed to work together for optimum printing results.
- Handle HP LaserJet Tough paper by the edges. Oils from your fingers can cause print-quality problems.
- In either the software program or the printer driver, select **Tough Paper** as the media type, or print from a tray that is configured for HP LaserJet Tough paper.

CAUTION Transparent media that is not designed for LaserJet printing will melt in the printer, causing damage to the printer.

Recycled paper

This printer supports the use of recycled paper. Recycled paper must meet the same specifications as standard paper. See the *HP LaserJet Printer Family Print Media Specification Guide*. Hewlett-Packard recommends that recycled paper contain no more than 5% ground wood.

Printing and paper storage environment

Ideally, the printing and paper storage environment should be at or near room temperature, and not too dry or too humid. Remember paper is hygroscopic; it absorbs and loses moisture rapidly.

Heat works with humidity to damage paper. Heat causes the moisture in paper to evaporate, while cold causes it to condense on the sheets. Heating systems and air conditioners remove most of the humidity from a room. As paper is opened and used, it loses moisture, causing streaks and smudging. Humid weather or water coolers can cause the humidity to increase in a room. As paper is opened and used it absorbs any excess moisture, causing light print and dropouts. Also, as paper loses and gains moisture it can distort. This can cause jams.

As a result, paper storage and handling are as important as the paper-making process itself. Paper storage environmental conditions directly affect the feed operation.

Care should be taken not to purchase more paper than can be easily used in a short time (about 3 months). Paper stored for long periods might experience heat and moisture extremes, which can cause damage. Planning is important to prevent damage to a large supply of paper.

Unopened paper in sealed reams can remain stable for several months before use. Opened packages of paper have more potential for environmental damage, especially if they are not wrapped with a moisture-proof barrier.

The paper storage environment should be properly maintained to ensure optimum printer performance. The required condition is 20° to 24°C (68° to 75°F), with a relative humidity of 45% to 55%. The following guidelines should be helpful when evaluating the paper's storage environment:

- Paper should be stored at or near room temperature.
- The air should not be too dry or too humid (due to the hygroscopic properties of paper).
- The best way to store an opened ream of paper is to rewrap it tightly in its moisture-proof wrapping. If the printer environment is subject to extremes, unwrap only the amount of paper to be used during the day's operation to prevent unwanted moisture changes.

Printing on both sides (duplexing)

You can print on both sides of a sheet of paper (called duplexing or two-sided printing) manually.

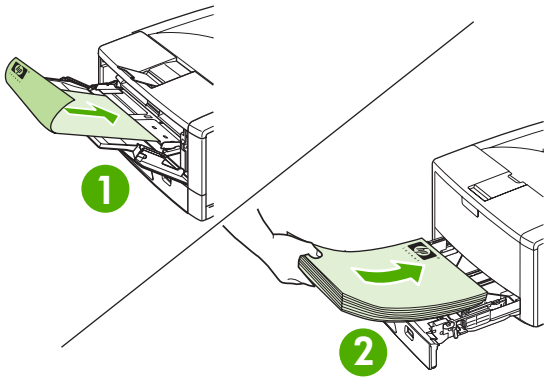
The printer prints the first side of each page, waits for you to reinsert the paper into the printer, and then prints the second side of each page. Other documents cannot be printed while the printer waits for you to insert the paper for the second side to be printed.

CAUTION Do not print on both sides of labels, transparencies, or vellum. Damage to the printer and jams might result.

Paper orientation for printing on both sides

For manual duplexing, print on the second side of the sheet of paper first. The paper needs to be oriented as shown in the following illustration.

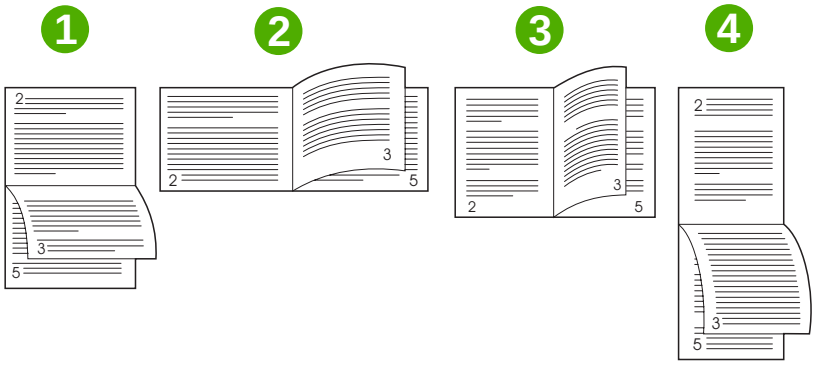
- For tray 1, load the first side facing down with the bottom, short edge toward the printer.
- For all other trays, load the first side facing up with the top, short edge toward the printer.



1	Tray 1
2	All other trays

Layout options for printing on both sides

The following illustration shows the four print-orientation options. These options are available when **Print on Both Sides** is selected on the **Finishing** tab in the printer driver.



1. Long-edge landscape[1]	This layout is often used in accounting, data processing, and spreadsheet programs. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.
2. Short-edge landscape	Each printed image is oriented right-side-up. Facing pages are read from top to bottom on the left page, then from top to bottom on the right page.
3. Long-edge portrait	This is the default printer setting, and the most common layout used, with every printed image oriented right-side-up. Facing pages are read from top to bottom on the left page, then from top to bottom on the right page.
4. Short-edge portrait*	This layout is often used with clipboards. Every other printed image is oriented upside-down. Facing pages are read continuously from top to bottom.

[1] When using Windows drivers, select **Flip Pages Up** to get the designated binding options.

To print on both sides

1. Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:
   - For tray 1, load the letterhead paper with the front side down, bottom-edge first.
   - For tray 2, load the letterhead paper with first side up, top edge toward the back of the tray.
2. Open the printer driver (see Gaining access to printer driver settings).
3. On the **Finishing** tab, select **Print on Both Sides**.
4. Click **OK**.
5. Send the print job to the printer.
6. Go to the printer. Remove any blank paper that is in tray 1. Insert the printed stack with the blank side up, with the top-edge feeding into the printer *first*. You *must* print the second side from tray 1.
7. If prompted by a message at the control panel-display, press ✓.

NOTE If the number of total sheets exceeds the tray 1 capacity for duplex jobs, you must repeat steps 6 and 7 each time that paper is inserted, until the duplexing job is complete.

CAUTION Hewlett-Packard recommends manually reusing sheets only through tray 1. Do not reuse sheets through tray 2, as this can cause jams and print-quality problems.

Using features in the Windows printer driver

When you print from a software program, many of the product features are available from the printer driver. For complete information about the features that are available in the printer driver, see the printer-driver Help. The following features are described in this section:

- Creating and using quick sets
- Using watermarks
- Resizing documents
- Setting a custom paper size from the printer driver
- Using different paper and printing covers
- Printing a blank first page
- Printing multiple pages on one sheet of paper

NOTE Settings in the printer driver and software program generally override control-panel settings. Software-program settings generally override printer-driver settings.

Creating and using quick sets

Use quick sets to save the current driver settings for reuse. Quick sets are available on most printer-driver tabs. You can save up to 25 Print Task Quick Sets.

To create a quick set

1. Open the printer driver (see Gaining access to printer driver settings).
2. Select the print settings that you want to use.
3. In the **Print Task Quick Sets** box, type a name for the quick set.
4. Click **Save**.

To use quick sets

1. Open the printer driver (see Gaining access to printer driver settings).
2. Select the quick set that you want to use from the **Print Task Quick Sets** drop-down list.
3. Click **OK**.

NOTE To use printer-driver default settings, select **Default Print Settings** from the **Print Task Quick Sets** drop-down list.

Using watermarks

A watermark is a notice, such as "Confidential," that is printed in the background of each page of a document.

1. Open the printer driver (see Gaining access to printer driver settings).
2. From the **Effects** tab, click the **Watermarks** drop-down list.
3. Click the watermark that you want to use. To create a new watermark, click **Edit**.
4. If you want the watermark to appear only on the first page of the document, click **First Page Only**.
5. Click **OK**.

To remove the watermark, click **(none)** in the **Watermarks** drop-down list.

Resizing documents

Use the document resizing options to scale a document to a percentage of its normal size. You can also choose to print a document on a different size paper, with or without scaling.

To reduce or enlarge a document

1. Open the printer driver (see Gaining access to printer driver settings).
2. On the **Effects** tab, next to **% of Normal Size**, type the percentage by which you want to reduce or enlarge your document.

   You can also use the scroll bar to adjust the percentage.
3. Click **OK**.

To print a document onto a different paper size

1. Open the printer driver (see Gaining access to printer driver settings).
2. On the **Effects** tab, click **Print Document On**.
3. Select the paper size to print on.
4. To print the document without scaling it to fit, make sure that the **Scale to Fit** option is *not* selected.
5. Click **OK**.

Setting a custom paper size from the printer driver

1. Open the printer driver (see Gaining access to printer driver settings).
2. On the **Paper** or **Paper/Quality** tab, click **Custom**.
3. On the **Custom Paper Size** window, type the name of the custom paper size.
4. Type the paper-size length and width. If you type a size that is too small or too large, the driver adjusts the size to the minimum or maximum size that is allowed.
5. If necessary, click the button to change the unit of measure between millimeters and inches.

6. Click **Save**.
7. Click **Close**. The name that you saved appears in the paper-size list for future use.

Using different paper and printing covers

Follow these instructions for printing a first page that is different from other pages in the print job.

1. Open the printer driver (see Gaining access to printer driver settings).
2. On the **Paper** or **Paper/Quality** tab, select the appropriate paper for the first page of the print job.
3. Click **Use Different Paper/Covers**.
4. In the list box, click the pages or covers that you want to print on different paper.
5. To print front or back covers, you must also select **Add Blank or Preprinted Cover**.
6. Select the appropriate paper type or source for the other pages of the print job.

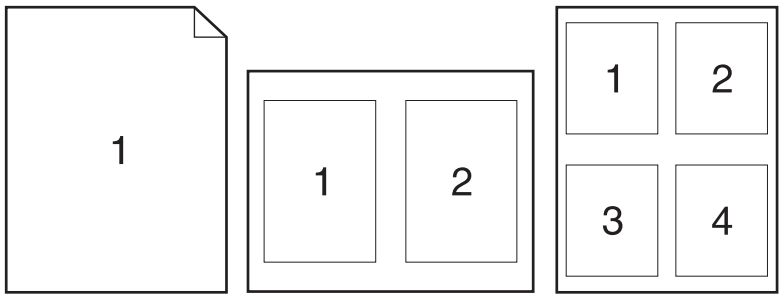
NOTE The paper size must be the same for all pages of the print job.

Printing a blank first page

1. Open the printer driver (see Gaining access to printer driver settings).
2. On the **Paper** or **Paper/Quality** tab, click **Use Different Paper/Covers**.
3. In the list box, click **Front Cover**.
4. Click **Add Blank or Preprinted Cover**.

Printing multiple pages on one sheet of paper

You can print more than one page on a single sheet of paper.



1. Open the printer driver (see Gaining access to printer driver settings).
2. Click the **Finishing** tab.

3. In the section for **Document Options**, select the number of pages that you want to print on each sheet (1, 2, 4, 6, 9, or 16).
4. If the number of pages is greater than 1, select the correct options for **Print Page Borders** and **Page Order**.
5. Click **OK**. The product is now set to print the number of pages per sheet that you have selected.

Using features in the Macintosh printer driver

When you print from a software program, many of the printer features are available from the printer driver. For complete information about the features that are available in the printer driver, see the printer-driver Help. The following features are described in this section:

- Creating and using presets
- Printing a cover page
- Printing multiple pages on one sheet of paper
- Printing on both sides of the paper

NOTE Settings in the printer driver and software program generally override control-panel settings. Software-program settings generally override printer-driver settings.

Creating and using presets

Use presets to save the current printer driver settings for reuse.

To create a preset

1. Open the printer driver (see Gaining access to printer driver settings).
2. Select the print settings.
3. In the **Presets** box, click **Save As...**, and type a name for the preset.
4. Click **OK**.

To use presets

1. Open the printer driver (see Gaining access to printer driver settings).
2. In the **Presets** menu, select the preset that you want to use.

NOTE To use printer-driver default settings, select the **Standard** preset.

Printing a cover page

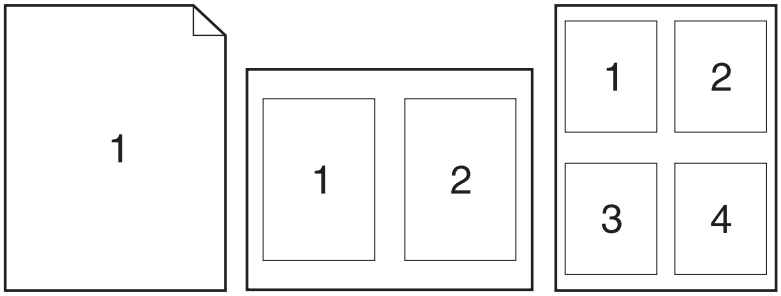
You can print a separate cover page for your document that includes a message (such as “Confidential”).

1. Open the printer driver (see Gaining access to printer driver settings).
2. On the **Cover Page** or **Paper/Quality** pop-up menu, select whether to print the cover page **Before Document** or **After Document**.
3. In the **Cover Page Type** pop-up menu, select the message that you want to print on the cover page.

NOTE To print a blank cover page, select **Standard** as the **Cover Page Type**.

Printing multiple pages on one sheet of paper

You can print more than one page on a single sheet of paper. This feature provides a cost-effective way to print draft pages.



1. Open the printer driver (see Gaining access to printer driver settings).
2. Click the **Layout** pop-up menu.
3. Next to **Pages per Sheet**, select the number of pages that you want to print on each sheet (1, 2, 4, 6, 9, or 16).
4. Next to **Layout Direction**, select the order and placement of the pages on the sheet.
5. Next to **Borders**, select the type of border to print around each page on the sheet.

Printing on both sides of the paper

CAUTION To avoid jams, do not load paper that is heavier than 105 g/m^2 (28-lb bond).

1. Insert enough paper into one of the trays to accommodate the print job. If you are loading special paper such as letterhead, load it in one of the following ways:
   - For tray 1, load the letterhead paper face-up with the bottom edge feeding into the printer first.
   - For all other trays, load the letterhead paper face-down with the top edge at the back of the tray.
2. Open the printer driver (see Gaining access to printer driver settings).
3. On the **Finishing** pop-up menu, select the **Manual Duplex** option.

   NOTE If the **Manual Duplex** option is not enabled, select **Manually Print on 2nd Side**.
4. Click **Print**. Follow the instructions in the pop-up window that appears on the computer screen before replacing the output stack in tray 1 for printing the second half.
5. Go to the printer, and remove any blank paper that is in tray 1.

6. Insert the printed stack face-up with the bottom edge feeding into the printer first in tray 1. You *must* print the second side from tray 1.
7. If prompted, press the appropriate control-panel button to continue.

Managing special printing situations

Printing a different first page

Use the following procedure to print the first page of a document on a different media type than the remainder of the document. For example, you can print the first page of a document on letterhead paper and the remainder on plain paper.

1. From your software program or printer driver, specify a tray for the first page and another tray for the remaining pages.
2. Load the special media into the tray that you specified in step 1.
3. Load the media for the remaining pages of the document into another tray.
4. Print the document.

You can also print on different media by using the printer control panel or printer driver to set the types of media that are loaded in the trays and then selecting the first and remaining pages by media type.

Stopping a print request

You can stop a print request by using the printer control panel or using your software program.

NOTE It can take some time for all printing to clear after you have canceled a print job.

To stop the current print job from the printer control panel

1. Press Stop on the printer control panel.
2. Press ▼ to highlight **CANCEL CURRENT JOB**, and then press ✓ to cancel the job.

   If the print job is too far into the printing process, you might not have the option to cancel it.

To stop the current print job from the software program

A dialog box will appear briefly on the screen, giving you the option to cancel the print job.

If several requests have been sent to the printer through your software, they might be waiting in a print queue (for example, in Windows Print Manager). See the software documentation for specific instructions about canceling a print request from the computer.

If a print job is waiting in a print queue (computer memory) or print spooler (Windows 98, 2000, XP, or Me), delete the print job there.

For Windows 98 or Windows Me, click **Start**, click **Settings**, and then click **Printers.** For Windows 2000 and Windows XP, click **Start** and then click **Printers**. Double-click the HP LaserJet 5200L printer icon to open the print spooler. Select the print job that you want to cancel, and then press Delete. If the print job is not cancelled, you might need to shut down and restart the computer.

Managing stored jobs

NOTE This feature is available only for printers that have installed hard drives. You must have 80 MB of memory installed to use this feature.

To store print jobs on the printer, use the **Job Storage** tab in the printer driver **Properties** dialog box. After a job is stored, you can print it or delete it from the printer control panel.

To print a stored job

1. Press Menu.
2. Press ▼ to highlight **RETRIEVE JOB**, and then press ✓.

   A list of users appears. If no jobs are stored , then the message **NO STORED JOBS** appears.
3. Press ▼ to highlight your user name, and then press ✓.

   - If you have more than one stored job that is protected by a personal identification number (PIN), the **ALL PRIVATE JOBS** menu item appears. If you want to print one of the PIN-protected jobs, highlight **ALL PRIVATE JOBS**, and then press ✓.
4. Press ▼ to highlight the correct print job, and then press ✓.
5. Press ▼ to highlight **PRINT**, and then press ✓.

   - If the job is *not* PIN-protected, go to step 7.
6. If prompted, provide a PIN by pressing ▲ or ▼ to change the number. Press ✓ after you have specified each number of the four-digit PIN.
7. Press ▲ and ▼ to specify the number of copies, and then press ✓ to print the job.

To delete a stored job

1. Press Menu.
2. Press ▼ to highlight **RETRIEVE JOB**, and then press ✓.

   A list of users appears. If there are no stored jobs, then the message **NO STORED JOBS** appears.
3. Press ▼ to highlight your user name, and then press ✓.

   - If you have more than one stored job that is PIN-protected, the **ALL PRIVATE JOBS** menu item appears. If you want to delete one of the PIN-protected jobs, highlight **ALL PRIVATE JOBS**, and then press ✓.
4. Press ▼ to highlight the correct print job, and then press ✓.
5. Press ▼ to highlight **DELETE**, and then press ✓.

   If the job is *not* PIN-protected, the printer deletes the job.
6. If prompted, provide a PIN by pressing ▲ or ▼ to change the number. Press ✓ after you have specified each number of the four-digit PIN.

   The printer deletes the job after you set the fourth PIN digit and press ✓.

Managing memory

The printer supports up to 128 MB of memory. You can add additional memory by installing a dual inline memory module (DIMM) in the DIMM slot, which accepts 32, 48, 64, or 128 of RAM. For information about installing memory, see Working with memory.

The printer uses 100-pin 133 MHz DDR memory modules. Extended data output (EDO) DIMMs are not supported.

NOTE If memory problems occur when you are printing complex graphics, you can make more memory available by removing downloaded fonts, style sheets, and macros from printer memory. Reducing the complexity of a print job from within a program can help avoid memory problems.

NOTE Be sure to update the printer configuration in the printer driver after adding memory. See Enabling memory for Windows.

5 Managing the printer

This chapter describes how to manage the printer:

- Using printer information pages
- Using the HP Easy Printer Care software
- Using the HP Printer Utility for Macintosh

Using printer information pages

From the printer control panel, you can print pages that give details about the printer and its current configuration. The table below provides the procedures for printing the information pages.

Page description	How to print the page
Menu map Shows the control-panel menus and available settings.	1. Press Menu. 2. Press ▼ to highlight **INFORMATION**, and then press ✓. 3. If **PRINT MENU MAP** is not highlighted, press ▲ or ▼ until it is highlighted, and then press ✓. The content of the menu map varies, depending on the options currently installed in the printer. For a complete list of control panel menus and possible values, see Using the control-panel menus.
Configuration page Shows printer settings and installed accessories.	1. Press Menu. 2. Press ▼ to highlight **INFORMATION**, and then press ✓. 3. Press ▼ to highlight **PRINT CONFIGURATION**, and then press ✓. **NOTE** If the printer contains an HP Jetdirect print server or an optional hard disk drive, an additional configuration page prints that provides information about those devices.
Supplies status page Shows print-cartridge toner levels.	1. Press Menu. 2. Press ▼ to highlight **INFORMATION**, and then press ✓. 3. Press ▼ to highlight **PRINT SUPPLIES STATUS PAGE**, and then press ✓. **NOTE** If you are using non-HP supplies, the supplies status page might not show the remaining life for those supplies. For more information, see HP policy on non-HP print cartridges.
Usage page Shows a page count for each size of paper printed, the number of one-sided (simplexed) or two-sided (duplexed) pages, and the average percentage of coverage.	1. Press Menu. 2. Press ▼ to highlight **INFORMATION**, and then press ✓. 3. Press ▼ to highlight **PRINT USAGE PAGE**, and then press ✓.
PCL or PS font list Shows which fonts are currently installed in the printer.	1. Press Menu. 2. Press ▼ to highlight **INFORMATION**, and then press ✓. 3. Press ▼ to highlight **PRINT PCL FONT LIST** or **PRINT PS FONT LIST**, and then press ✓. **NOTE** The font lists also show which fonts are resident on an optional hard disk accessory or flash DIMM.

Using the HP Easy Printer Care software

The HP Easy Printer Care software is a program that you can use for the following tasks:

- Check the printer status.
- Check supplies status.
- Set up alerts.
- Gain access to troubleshooting and maintenance tools.

You must perform a complete software installation to use the HP Easy Printer Care software.

NOTE You do not have to have Internet access to open and use the HP Easy Printer Care software. However, if you click a Web-based link, you must have Internet access to go to the site associated with the link.

Supported operating systems

The HP Easy Printer Care software is supported for Windows 2000 and Windows XP.

Supported browsers

To use the HP Easy Printer Care software, you must have one of the following browsers:

- Microsoft Internet Explorer 5.5 or later
- Netscape Navigator 7.0 or later
- Opera Software ASA Opera 6.05 or later

All pages can be printed from the browser.

To open the HP Easy Printer Care software

Use one of the following methods to open HP Easy Printer Care software:

- On the **Start** menu, select **Programs**, select **HP**, and then select **HP Easy Printer Care software**.
- In the Windows system tray (in the lower-right corner of the desktop), double-click the HP Easy Printer Care software icon.
- Double-click the desktop icon.

HP Easy Printer Care software sections

Section	Options
Overview tab Contains basic status information for the printer	• **Devices** list: Shows the printers that you can select. • **Device Status** section: Shows printer status information. This section will indicate printer alert conditions, such as an empty print cartridge. It also shows device-identification information, control-panel messages, and print-cartridge levels. After you correct a problem with the printer, click the button to update the section.

Section	Options
	• **Supplies Status** section: Shows detailed supplies status, such as the percentage of toner remaining in the print cartridge and the status of the media that is loaded in each tray. • **Supplies Details** link: Opens the supplies status page to view more detailed information about printer supplies, ordering information, and recycling information.
Support tab Provides help information and links	• Provides device information, including alerts for items needing attention. • Provides links to troubleshooting information and tools. • Provides links to the HP Web site for registration, support, and for ordering supplies. **NOTE** If you use a dial-up connection and did not connect to the Internet when you first opened the HP Easy Printer Care software, you must connect before you can visit these Web sites.
Supplies Ordering window Provides access to online or e-mail supplies ordering	• Ordering list: Shows the supplies that you can order for each printer. If you want to order a certain item, click the **Order** check box for that item in the supplies list. • **Shop Online for Supplies** button: Opens the HP supplies Web site in a new browser window. If you have checked the **Order** check box for any items, the information about those items can be transferred to the Web site. • **Print Shopping List** button: Prints the information for the supplies that have the **Order** check box selected. • **Email Shopping List** button: Creates a text list of items that have the **Order** check box selected. The list can be copied into an e-mail message that you send to your supplier.
Alert Settings window Allows you to configure the printer to automatically notify you of printer issues	• Alerts on or off: Activates or deactivates the alerts feature for a certain printer. • When alerts appear: Sets when you want alerts to appear—either when you are printing to that particular printer, or anytime there is a printer event. • Alert event type: Sets whether you want alerts for only critical errors, or for any error, including continuable errors. • Notification type: Sets what type of alert should appear (pop-up message or system tray alert, and e-mail message).
Device List tab Shows information about each printer in the **Devices** list	• Printer information, including printer name, make, and model • An icon (if the **View as** drop-down box is set to **Tiles**, which is the default setting) • Any current alerts for the printer If you click a printer in the list, the HP Easy Printer Care software opens the **Overview** tab for that printer.
Find Other Printers window Allows you to add more printers to your printer list	Clicking the **Find Other Printers** link in the **Devices** list opens the **Find Other Printers** window. The **Find Other Printers** window provides a utility that detects other printers so that you can add them to the **Devices** list and then monitor those printers from your computer.

Using the HP Printer Utility for Macintosh

Use the HP Printer Utility to configure and maintain a printer from a Mac OS X computer.

Opening the HP Printer Utility

To open the HP Printer Utility in Mac OS X V10.2

1. Open the Finder, and then click **Applications**.
2. Click **Library**, and then click **Printers**.
3. Click **hp**, and then click **Utilities**.
4. Double-click **HP Printer Selector** to open the HP Printer Selector.
5. Select the printer that you want to configure, and then click **Utility**.

To open the HP Printer Utility in Mac OS X V10.3 or V10.4

1. In the Dock, click the **Printer Setup Utility** icon.

NOTE If the **Printer Setup Utility** icon does not appear in the Dock, open the Finder, click **Applications**, click **Utilities**, and then double-click **Printer Setup Utility**.

2. Select the printer that you want to configure, and then click **Utility**.

HP Printer Utility features

The HP Printer Utility consists of pages that you open by clicking in the **Configuration Settings** list. The following table describes the tasks that you can perform from these pages.

Item	Description
Configuration Page	Prints a configuration page.
Supplies Status	Shows the printer supplies status and provides links for online supplies-ordering.
HP Support	Provides access to technical assistance, online supplies ordering, online registration, and recycling and return information.
File Upload	Transfers files from the computer to the printer.
Upload Fonts	Transfers font files from the computer to the printer.
Firmware Update	Transfers updated firmware files from the computer to the printer.
Economode & Toner Density	Turns on the Economode setting to conserve toner, or adjusts toner density.
Resolution	Changes the resolution settings, including the REt setting.
Trays Configuration	Changes the default printer tray settings.
E-mail Alerts	Configures the printer to send e-mail notices for certain events.

6 Maintenance

This chapter describes ways to maintain the printer:

- Managing supplies
- Replacing supplies and parts
- Cleaning the printer

Managing supplies

Using, storing, and monitoring the print cartridge can help ensure high-quality printer output.

Supplies life

The average cartridge yield is 12,000 pages in accordance with ISO/IEC 19752. Actual cartridge yield depends on specific use.

Approximate print-cartridge replacement intervals

Print cartridge	Page count	Approximate time period[1]
Black	12,000 pages[2]	6 months

[1] Approximate life is based on 2,000 pages per month.
[2] Approximate average A4-/letter-size page count based on approximately 5% coverage.

To order supplies online, go to www.hp.com/support/lj5200l.

Managing the print cartridge

Print-cartridge life expectancy

The average cartridge yield is 12,000 pages in accordance with ISO/IEC 19752. Actual cartridge yield depends on specific use.

CAUTION Hewlett-Packard does not recommend full-time use of EconoMode. (If EconoMode is used consistently to print media with less than 5% toner coverage, the toner supply might outlast the mechanical parts in the print cartridge.)

Print-cartridge storage

Do not remove the print cartridge from its package until you are ready to use it.

CAUTION To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

HP print cartridges

When you use a genuine new HP print cartridge, you can obtain the following supplies information:

- Percentage of supplies remaining
- Estimated number of pages remaining
- Number of pages printed

HP policy on non-HP print cartridges

Hewlett-Packard Company cannot recommend the use of non-HP print cartridges, either new or remanufactured. Because they are not HP products, HP cannot influence their design or control their quality.

CAUTION Any damage caused by a non-HP print cartridge is not covered under the HP warranty and service agreements.

To install a new HP print cartridge, see Changing the print cartridge. To recycle the used cartridge, follow the instructions included with the new cartridge.

Print-cartridge authentication

The printer automatically authenticates the print cartridge when it is inserted into the printer. During authentication, the printer will let you know whether a cartridge is a genuine HP print cartridge.

If the printer control-panel message states that this is not a genuine HP print cartridge and you believe you purchased an HP print cartridge, see HP fraud hotline and Web site.

HP fraud hotline and Web site

Call the HP fraud hotline (1-877-219-3183, toll-free in North America) or go to www.hp.com/go/anticounterfeit when you install an HP print cartridge and the printer message says the cartridge is non-HP. HP will help determine if the product is genuine and take steps to resolve the problem.

Your print cartridge might not be a genuine HP print cartridge if you notice the following:

- You are experiencing a high number of problems with the print cartridge.
- The cartridge does not look like it usually does (for example, the orange pull tab is missing, or the packaging differs from HP packaging).

Replacing supplies and parts

Carefully follow the guidelines in this section when replacing printer supplies.

Supply replacement guidelines

To facilitate the replacement of supplies, keep the following guidelines in mind when setting up the printer.

- Sufficient space is required above and in the front of the printer for removing supplies.
- The printer should be located on a flat, sturdy surface.

For instructions on installing supplies, see the installation guides provided with each supply item or see more information at www.hp.com/support/lj5200l.

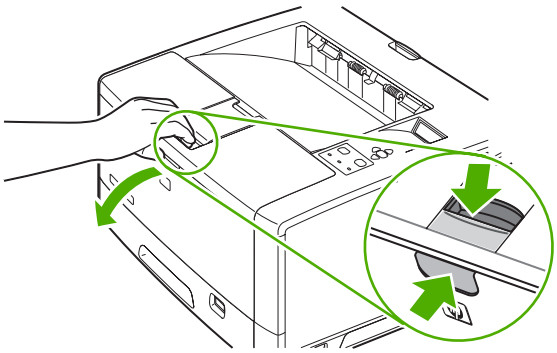
CAUTION Hewlett-Packard recommends the use of HP products in this printer. Use of non-HP products may cause problems requiring service that is not covered by the HP warranty or service agreements.

Changing the print cartridge

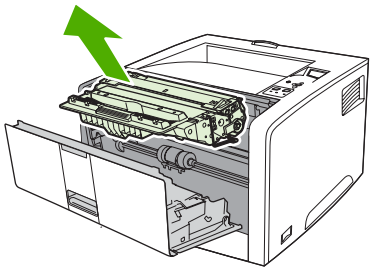
When a print cartridge approaches the end of useful life, a message appears on the control panel recommending that you order a replacement. The printer can continue to print using the current print cartridge until a message appears instructing you to replace the cartridge.

To change the print cartridge

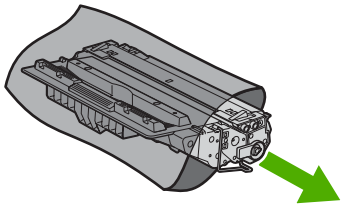
1. Open the front cover.



2. Remove the used print cartridge from the printer.

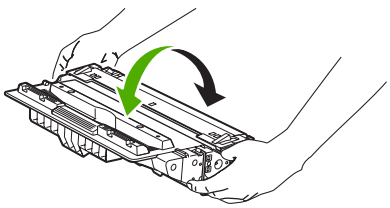


3. Remove the new print cartridge from the bag. Place the used print cartridge in the bag for recycling.

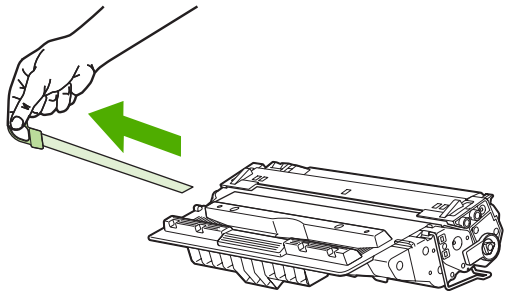


4. Grasp both sides of the print cartridge and distribute the toner by gently rocking the print cartridge.

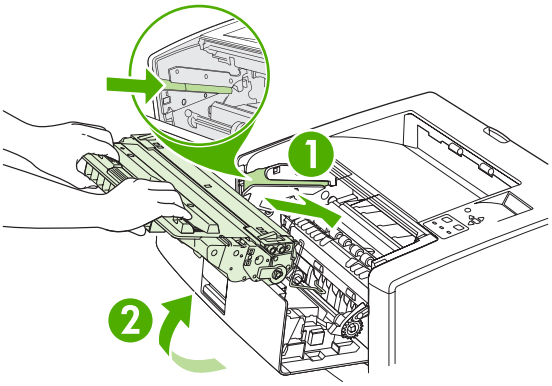
CAUTION Do not touch the shutter or the surface of the roller.



5. Remove the shipping tape from the new print cartridge. Discard the shipping tape according to local regulations.



6. Align the print cartridge with the tracks inside the printer, and, using the handle, insert the print cartridge until it is firmly seated, and then close the front door.



After a short time, the control panel should display **Ready**.

7. Installation is complete. Place the used print cartridge in the box in which the new cartridge arrived. See the enclosed recycling guide for recycling instructions.

8. If you are using a non-HP print cartridge, check the printer control panel for further instructions.

For additional help, go to www.hp.com/support/lj5200l.

Cleaning the printer

During the printing process, paper, toner, and dust particles can accumulate inside the printer. Over time, this buildup can cause print-quality problems, such as toner specks or smearing (see Troubleshooting print-quality problems). This printer has a cleaning mode that can correct and prevent these types of problems.

To clean the printer using the printer control panel

1. Press Menu.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **PRINT QUALITY**, and then press ✓.
4. Press ▼ to highlight **CREATE CLEANING PAGE**, and then press ✓.
5. Remove all paper from tray 1.
6. Remove the cleaning page and load it face-down in tray 1.

   NOTE If you are not in the menus, navigate to **PRINT QUALITY** by using the previous instructions.

7. At the printer control panel, press ▼ to highlight **PROCESS CLEANING PAGE**, and then press ✓.

7 Problem solving

This troubleshooting information is organized to help you resolve printing problems. Choose the general topic or type of problem from the following list.

- Basic troubleshooting checklist
- Troubleshooting flowchart
- Solving general printing problems
- Control-panel message types
- Control-panel messages
- Guidelines for using paper
- Printing special pages
- Common causes of jams
- Jam locations
- Clearing jams
- Troubleshooting print-quality problems
- Troubleshooting common Windows problems
- Troubleshooting common Macintosh problems
- Troubleshooting Linux problems
- Troubleshooting common PostScript problems

Basic troubleshooting checklist

If you are experiencing problems with the printer, use the following checklist to identify the cause of the problem:

- Is the printer connected to power?
- Is the printer on?
- Is the printer in the **Ready** state?
- Are all necessary cables connected?
- Do any messages appear on the control panel?
- Are genuine HP supplies installed?
- Was a recently replaced print cartridge installed correctly, and was the pull tab on the cartridge removed?

For additional information about installation and setup, see the printer getting started guide.

If you cannot find solutions to printer problems in this guide, go to www.hp.com/support/lj5200l.

Factors that affect printer performance

Several factors affect the time it takes to print a job:

- Maximum printer speed, measured in pages per minute (ppm)
- The use of special paper (such as transparencies, heavy paper, and custom-size paper)
- Printer processing and download time
- The complexity and size of graphics
- The speed of the computer you are using
- The USB connection
- The printer I/O configuration
- The amount of printer memory installed
- Printer personality (PCL or PS)

NOTE Although additional printer memory can resolve memory problems, improve how the printer handles complex graphics, and improve download times, it will not increase maximum printer speed (ppm).

Troubleshooting flowchart

If the printer is not responding correctly, use the flowchart to determine the problem. If the printer does not pass a step, follow the corresponding troubleshooting suggestions.

If you cannot resolve the problem after following the suggestions in this guide, contact an HP-authorized service or support provider. (See HP Customer Care.)

NOTE **Macintosh users**: For more troubleshooting information, see Troubleshooting common Macintosh problems.

Step 1: Does READY appear on the control-panel display?

YES →	**Go to step 2.**			
NO ↓				
The display is blank, and the printer fan is off.	**The display is blank, but the printer fan is on.**	**The display is in the wrong language.**	**The display shows garbled or unfamiliar characters.**	**A message other than READY appears on the control-panel display.**
• Turn the printer off and then on. • Check the power cord connections and the power switch. • Plug the printer into a different outlet. • Check that the power supplied to the printer is steady, and meets printer specifications. (See Electrical specifications.)	• Press a printer control-panel button to see if the printer responds. • Turn the printer off and then on.	• Turn the printer off and then on. When **XXX MB** appears on the control-panel display, press and hold down ✓ until all three lights stay on. This could take up to 10 seconds. Then, release ✓. Press ▼ to scroll through the available languages. Press ✓ to save the appropriate language as the new default.	• Make sure that the appropriate language is selected at the printer control panel. • Turn the printer off and then on.	• Go to Control-panel messages.

Step 2: Can you print a configuration page?

(See Using printer information pages.)

YES →	**Go to step 3.**
NO ↓	

A configuration page does not print.	A blank page prints.	A message other than READY or PRINTING CONFIGURATION appears on the control-panel display.
• Check that all trays are correctly loaded, adjusted, and installed in the printer. • Using the computer, check the print queue or print spooler to see if the printer has been paused. If there are problems with the current print job, or if the printer is paused, a configuration page will not print. (Press Stop and try step 2 in the troubleshooting flowchart again.)	• Check that the sealing tape does not remain on the print cartridge. (See the getting started guide or the instructions that came with the print cartridge.) • The print cartridge might be empty. Install a new print cartridge.	• Go to Control-panel messages.

Step 3: Can you print from a program?

YES →	Go to step 4.
NO↓	
The job will not print.	**A PS error page or list of commands prints.**
• If the job will not print, and a message appears on the printer control-panel display, see Control-panel messages. • Using the computer, check to see if the printer has been paused. Press Stop to continue. • Check the interface cable connections. Disconnect and reconnect the cable at the computer and the printer. • Test the cable by trying it on another computer. • If you are using a parallel connection, make sure that the cable is IEEE-1284 compliant. • To verify that it is not a computer problem, print from another computer (if possible). • Make sure that the print job is being sent to the correct port (LPT1 port, for example). • Check that you are using the correct printer driver. (See Printer drivers.) • Reinstall the printer driver. (See the getting started guide.) • Check that the computer port is configured and working correctly. (Try connecting another printer to that port and printing.) • If printing with the PS driver, on the **PRINTING** submenu (on the **CONFIGURE DEVICE** menu) at the printer control panel, set **PRINT PS ERRORS=ON**, and then print the job again. If an error page prints, see the instructions in the next column.	• The printer might have received a nonstandard PS code. On the **SYSTEM SETUP** submenu (on the **CONFIGURE DEVICE** menu) at the printer control panel, set **PERSONALITY=PS** for this print job only. After the job has printed, return the setting to **AUTO**. • Make sure that the print job is a PS job, and that you are using the PS driver. • The printer might have received PS code although it is set to PCL. On the **SYSTEM SETUP** submenu (on the **CONFIGURE DEVICE** menu), set **PERSONALITY=AUTO**.

- On the **SYSTEM SETUP** submenu (on the **CONFIGURE DEVICE** menu) at the printer control panel, make sure that **PERSONALITY=AUTO**.
- You might be missing a printer message that could help you solve the problem. On the **SYSTEM SETUP** submenu (on the **CONFIGURE DEVICE** menu) at the printer control panel, temporarily turn off the **CLEARABLE WARNINGS** and **AUTO CONTINUE** settings. Then, print the job again.

Step 4: Does the job print as expected?

YES →	**Go to step 5.**		
NO ↓			
Print is garbled, or only a portion of the page prints.	**Printing stops in the middle of the job.**	**Print speed is slower than expected.**	**A printer control panel setting is not taking effect.**
• Check that you are using the correct printer driver. (See Printer drivers.) • The data file sent to the printer might be corrupt. To test, try printing it on another printer (if possible), or try a different file. • Check the interface cable connections. Test the cable by trying it on another computer (if possible). • Replace the interface cable with a high-quality cable (see Part numbers). • Simplify the print job, print at a lower resolution, or install more printer memory. (See Installing printer memory.) • You might be missing a printer message that could help you solve the problem. On the **SYSTEM SETUP** submenu (on the **CONFIGURE DEVICE** menu) at the printer control panel, temporarily turn the **CLEARABLE WARNINGS** and	• You might have pressed Stop. • Check that the power supplied to the printer is steady, and that it meets printer specifications. (See Electrical specifications.)	• Simplify the print job. • Add more memory to the printer. (See Installing printer memory.) • Turn banner pages off. (See your network administrator.) • Note that slower speeds should be expected if you are printing narrow paper, printing from tray 1, using the **HIGH2** fuser mode, or have set **Small Paper Speed** to **SLOW**.	• Check settings in the printer driver or program. (The printer driver and program settings override printer control-panel settings.)

AUTO CONTINUE settings off. Then print the job again.

The print job is not formatted correctly.	Paper is not fed correctly or is damaged.	There are print-quality problems.
• Check that you are using the correct printer driver. (See Printer drivers.) • Check the program settings. (See the program online Help.) • Try a different font. • Downloaded resources might have been lost. You might need to download them again.	• Make sure that the paper is loaded correctly and that the guides are not too tight or too loose against the stack. • If you are having problems printing custom-size paper, see Printing on special media. • If pages are wrinkled or curled, or if the image is skewed on the page, see Troubleshooting print-quality problems.	• Adjust the print resolution. (See Print Quality submenu.) • Check that REt is on. (See Print Quality submenu.) • Go to Troubleshooting print-quality problems.

Step 5: Does the printer select the trays?

YES → **For other problems, check the Contents, the Index, or the printer driver online Help.**

NO↓

The printer pulls paper from the wrong tray.	A message other than READY appears on the printer control panel display.
• Make sure that you have selected the correct tray. (See Source.) • Make sure that trays are correctly configured for paper size and type. (See Configuring trays.) Print a configuration page to see current tray settings. (See Using printer information pages.) Ensure that the media-size window on the front of the tray matches the size setting on the control panel. • Make sure that the tray selection (Source) or Type in the printer driver or program is set correctly. (The printer driver and program settings override the printer control panel settings.) • By default, paper loaded in tray 1 will be printed first. If you do not want to print from tray 1, remove any paper loaded in the tray or change the **USE REQUESTED TRAY** setting. (See Customizing tray 1 operation.) Change **TRAY 1 SIZE** and **TRAY 1 TYPE** to a setting other than **ANY**. • If you want to print from tray 1, but cannot select the tray in a program, see Customizing tray 1 operation.	• Go to Control-panel messages.

Solving general printing problems

Printer selects media from the wrong tray.

Cause	Solution
The tray selection in the software program might be incorrect.	For many software programs, the paper tray selection is found on the **Page Setup** menu within the program. Remove any media in other trays to make the printer select from the correct tray. For Macintosh computers, use the HP Printer Utility to change the priority of the tray.
The configured size does not match the size of the media that is loaded in the tray.	Through the control panel, change the configured size to match the size of the media that is loaded in the tray. Also, change the media-size window, located on front upper right of the tray, to match the media-size settings. **Tray 2**: Make sure that the media-size dial matches the media loaded in the tray.

Printer does not pull paper from tray.

Cause	Solution
The tray is empty.	Load paper in the tray.
The paper guides are set incorrectly.	To set the guides correctly, see Configuring trays. For tray 2, make sure that the leading edge of the paper stack is even. An uneven edge can prevent the lift plate from rising.

Paper curls when it exits the printer.

Cause	Solution
The paper curls when it exits to the top output bin.	Open the rear output bin to allow the paper to exit in a straight path through the printer. Turn over the paper that you are printing on. Reduce the fusing temperature to reduce the curling. (See Print Quality submenu.)

First sheet of media jams in the print-cartridge area.

Cause	Solution
A combination of high humidity and high temperature is affecting the media.	Adjust the printer for high humidity and high temperature conditions.

Print job is extremely slow.

Cause	Solution
The job might be very complex. The maximum speed of the printer cannot be exceeded even when more memory is added. Printing speeds might be automatically reduced when printing on custom-sized media. Note: Slower speeds are expected when printing on narrow paper, when printing from tray 1, or when using the **HIGH2** fuser mode.	Reduce the complexity of the page or try adjusting the print-quality settings. If this problem occurs frequently, add memory to the printer.
You are printing a PDF or PostScript (PS) file but are using a PCL printer driver.	Try using the PS printer driver rather than the PCL printer driver. (You can usually do this from a software program.)
In the printer driver, **Optimize for:** is set to cardstock, heavy, rough, or bond paper.	In the printer driver, set the type to plain paper (see Controlling print jobs). **NOTE** If you change the setting to plain paper, the print job will print faster. However, if you are using heavy media, for best results leave the printer driver set to heavy even though printing might be slower.

Pages print, but are totally blank.

Cause	Solution
The sealing tape might still be on the print cartridge.	Remove the print cartridge and pull out the sealing tape. Reinstall the print cartridge.
The file might have blank pages.	Check the file to make sure that it does not contain blank pages.

The printer prints, but the text is wrong, garbled, or incomplete.

Cause	Solution
The printer cable is loose or defective.	Disconnect the printer cable and reconnect it. Try a print job that you know works. If possible, attach the cable and printer to another computer and try a print job that you know works. Finally, try a new cable.
The wrong driver was selected in the software.	Check the software printer selection menu to make sure that an HP LaserJet 5200L printer is selected.
The software program is malfunctioning.	Try printing a job from another program.

The printer does not respond when you select Print in the software.

Cause	Solution
The printer is out of media.	Add media.
The printer might be in the manual-feed mode.	Change the printer from manual-feed mode.

The printer does not respond when you select Print in the software.

Cause	Solution
The cable between the computer and the printer is not connected correctly.	Disconnect and reconnect the cable.
The printer cable is defective.	If possible, attach the cable to another computer and print a job that you know works. You might also try using a different cable.
The wrong printer was selected in the software.	Check the software printer selection menu to make sure that an HP LaserJet 5200L printer is selected.
The printer might have a jam.	Clear any jams. See Clearing jams.
The software for the printer is not configured for the printer port.	Check the software printer selection menu to make sure that it is using the correct port. If the computer has more than one port, make sure that the printer is attached to the correct one.
The printer is not receiving power.	If no lights are on, check the power cord connections. Check the power switch. Check the power source.
The printer is malfunctioning.	Check the control-panel display for messages and lights to determine if the printer is indicating an error. Note any message and see Control-panel messages.

Control-panel message types

Four types of control-panel messages can indicate the status of or problems with the printer.

Message type	Description
Status messages	Status messages reflect the current state of the printer. They inform you of normal printer operation and require no interaction to clear them. They change as the state of the printer changes. Whenever the printer is ready, not busy, and has no pending warning messages, the status message **Ready** appears if the printer is online.
Warning messages	Warning messages inform you of data and print errors. These messages typically alternate with the **Ready** or status messages and remain until the ✓ button is pressed. Some warning messages are clearable. If **CLEARABLE WARNINGS** is set to **JOB** on the printer **CONFIGURE DEVICE** menu, the next print job clears these messages.
Error messages	Error messages communicate that some action must be performed, such as adding paper or clearing a jam. Some error messages are auto-continuable. If **AUTO CONTINUE=ON** is set on the menus, the printer will continue normal operation after an auto-continuable error message appears for 10 seconds. **NOTE** Pressing any button during the 10-second auto-continuable error message overrides the auto-continue feature, and the button function takes precedence. For example, pressing the Stop button pauses printing and offers the option to cancel the print job.
Critical-error messages	Critical error messages inform you of a device failure. Some of these messages can be cleared by turning the printer off and then on. These messages are not affected by the **AUTO CONTINUE** setting. If a critical error persists, service is required.

Control-panel messages

Control panel message	Description	Recommended action
10.32.YY UNAUTHORIZED SUPPLY **Unauthorized supply in use** alternates with **For help press ?**	A new, non-HP supply has been installed. This message appears until an HP supply is installed or you press ✓.	If you believe you purchased an HP supply, please go to www.hp.com/go/anticounterfeit. Service or repairs required as a result of using non-HP supplies are not covered under HP warranty. To continue printing, press ✓. The first pending print job will be cancelled.
10.XX.YY SUPPLY MEMORY ERROR **For help press ?**	The printer cannot read or write to the print-cartridge memory tag, or the memory tag is missing.	1. Open the front door. 2. Remove the print cartridge, and then reinstall it. 3. Close the front door. 4. Turn the printer off and then on. 5. If the error persists, contact HP Support.
11.XX INTERNAL CLOCK ERROR alternates with **To continue press ✓**	The printer internal clock is not working correctly. Printing can continue, but you are prompted to set the date and time each time you turn the printer on.	Contact HP support.
13.XX.YY FUSER JAM INSIDE TOP COVER alternates with **For help press ?**	A jam has occurred in the fuser area.	1. Press ▼ to see step-by-step information. 2. Open the top cover, and then remove the print cartridge. 3. Remove all media found. 4. Lift the metal flap, and then remove any media remaining. 5. Reinstall the print cartridge, and then close the top cover. 6. To exit, press ?.
13.XX.YY JAM IN TRAY 1 alternates with **Clear jam then press ✓**	A page is jammed in the multipurpose tray.	1. Press ▼ to see step-by-step information. 2. Remove media from tray 1, and then remove any media in the printer. 3. Confirm that the media guides and dial are in the correct position and match the media that is loaded in the tray. 4. Reload media in tray 1. Do not load media above the fill tabs on the media

Control panel message	Description	Recommended action
		width guides, and confirm that the guides are in the correct position. 5. To continue printing, press ? to clear the message, and then press ✓.
13.XX.YY JAM IN TRAY 2	A page is jammed in tray 2.	Remove tray 2, clear the jam, and then reinstall tray 2. See Clearing jams from the input-tray areas. If the message persists after clearing all pages, contact HP Support.
13.XX.YY JAM IN TRAY X alternates with **Clear jam then press ✓**	A page is jammed in the tray indicated.	1. Press ▼ to see step-by-step information. 2. Remove the tray indicated. 3. Confirm that the media guides and dial are in the correct position and match the media that is loaded in the tray. 4. Remove all media found in the printer, and then reinstall the tray. 5. To exit, press ?. **NOTE** To avoid jams with heavier media, use tray 1 and the rear output bin.
13.XX.YY JAM INSIDE FRONT DOOR alternates with **For help press ?**	A jam has occurred inside the front door.	Press ? for help. or See Clearing jams from the print-cartridge area. If the message persists after clearing all pages and exiting Help, contact HP Support.
13.XX.YY JAM INSIDE REAR DOOR alternates with **Clear jam then press ✓**	A jam has occurred in the duplex reversing area.	1. Press ▼ to see step-by-step information. 2. Open rear door, and then remove all media found. 3. Close the rear door. 4. To exit, press ?.
13.XX.YY JAM INSIDE REAR DOOR alternates with **For help press ?**	A jam has occurred in the rear door area.	1. Press ▼ to see step-by-step information. 2. Open the rear door. 3. Release the four tabs in the center of the black paper guide inside the lower rear door.

Control panel message	Description	Recommended action
		4. Lower rear door completely, and then remove all media found. 5. Close the rear door. The four tabs in the paper guide will automatically reattach to the door. 6. To exit, press ?.
13.XX.YY JAM INSIDE TOP COVER alternates with **Remove print cartridge**	A jam has occurred in the registration assembly area.	1. Press the ▼ to see step-by-step information. 2. Open the top cover, and then remove the print cartridge. 3. Remove all media found. 4. Lift the metal flap, and then remove any media remaining. 5. Verify that the media size matches the tray settings and the dial on the tray. 6. Reinstall the print cartridge, and then close the top cover. 7. To exit, press ?.
20 INSUFFICIENT MEMORY alternates with **For help press ?** **To continue press ✓**	The printer has received more data from the computer than fits in available memory.	1. Press ✓ to continue printing. **NOTE** Data will be lost. 2. Reduce the complexity of the print job to avoid this error. 3. Adding memory to the printer may allow printing of more complex pages.
21 PAGE TOO COMPLEX alternates with **To continue press ✓**	The page-compression process is too slow for the printer. Some data may be lost on the page.	1. Press ▼ to see step-by-step information. 2. To print the job with some data loss, press ? to exit the message, and then press ✓. If data is lost, simplify the page content to reduce its complexity. 3. To exit, press ?.
22 PARALLEL I/O BUFFER OVERFLOW alternates with **To continue press ✓**	The printer parallel buffer has overflowed during a busy state.	1. Press ✓ to continue printing. **NOTE** Data will be lost. 2. If the message persists after exiting Help, contact HP Support.

Control panel message	Description	Recommended action
22 SERIAL I/O BUFFER OVERFLOW alternates with **To continue press ✓**	The printer serial buffer has overflowed during a busy state.	1. Press ✓ to continue printing. **NOTE** Data will be lost. 2. If the message persists, contact HP Support.
22 USB I/O BUFFER OVERFLOW alternates with **To continue press ✓**	The printer's USB buffer has overflowed during a busy state.	1. Press ✓ to continue printing. **NOTE** Data will be lost. 2. If the message persists, contact HP Support.
40 BAD SERIAL TRANSMISSION alternates with **To continue press ✓**	A serial data error (parity, framing, or line overrun) has occurred while the printer was receiving data.	1. Press ✓ to continue printing. **NOTE** Data will be lost. 2. If the message persists, contact HP Support.
41.3 UNEXPECTED SIZE IN TRAY X alternates with **LOAD TRAY X <TYPE> <SIZE>**	Media is loaded that is longer or shorter in the feed direction than the size configured for the tray.	1. Press ✓ to print from a different tray. 2. To print from the current tray, load the tray with the size and type indicated. Ensure that all trays are configured correctly before printing again. See Configuring trays for more information.
41.5 UNEXPECTED TYPE IN TRAY X alternates with **LOAD TRAY X <TYPE> <SIZE>**	The printer senses a different media type than what is configured in the tray.	1. Press ✓ to print from a different tray. 2. To print from the current tray, load the tray with the size and type indicated. Ensure that all trays are configured correctly before printing again. See Configuring trays for more information.
41.X ERROR alternates with **To continue press ✓**	A printer error has occurred.	1. Press ✓ to continue or press **?** for more information. 2. If the message persists after exiting help, turn the printer off and then on. 3. If the message persists, contact HP Support.
49.XXXXX ERROR alternates with **To continue turn off then on**	A critical firmware error has occurred.	1. Turn the printer off and then on. 2. If the message persists, contact HP Support.
50.X FUSER ERROR **For help press ?**	A fuser error has occurred.	1. Turn the printer off. 2. Verify the fuser is installed correctly and fully seated.

Control panel message	Description	Recommended action
		3. Turn on the printer. 4. If the message persists, contact HP Support.
51.XY ERROR alternates with **To continue turn off then on**	A printer error has occurred.	1. Press ✓ to continue. 2. If the message persists, turn the printer off and then on. 3. If the message persists, contact HP Support.
52.XY ERROR alternates with **To continue turn off then on**	A printer error has occurred.	1. Press ✓ to continue. 2. If the message persists, turn the printer off and then on. 3. If the message persists, contact HP Support.
53.10.01 ERROR UNSUPPORTED RAM	The memory DIMM is not a supported DIMM.	Install a supported DIMM. See Installing printer memory.
54.XX ERROR	A printer command error has occurred.	1. Turn the printer off and then on. 2. If the message persists, contact HP support.
55.XX.YY DC CONTROLLER ERROR alternates with **To continue turn off then on**	The engine is not communicating with the formatter.	1. Turn the printer off and then on. 2. If the message persists, contact HP Support.
56.XX ERROR alternates with **To continue turn off then on**	An error has occurred.	1. Turn the printer off and then on. 2. If the message persists, contact HP Support.
57.XX PRINTER ERROR alternates with **To continue turn off then on**	A printer fan error has occurred.	1. Turn the printer off and then on. 2. If the message persists, contact HP Support.
58.XX ERROR alternates with **To continue turn off then on**	An error has occurred in which a memory tag CPU was detected.	1. Press ▼ to view step-by-step information. 2. Turn the printer off and then on. 3. If the message persists, contact HP Support. 4. To exit, press ?.
59.XY ERROR alternates with **To continue turn off then on**	A printer motor error has occurred.	1. Turn the printer off and then on. 2. If the message persists, contact HP Support.

Control panel message	Description	Recommended action
		NOTE This message might also appear if the transfer unit is missing or incorrectly installed. Ensure that the transfer unit is correctly installed.
62 NO SYSTEM	No system was found.	1. Turn the printer off and then on. 2. If the message persists, contact HP Support.
64 ERROR **For help press ?** alternates with **To continue turn off then on**	A scan buffer error has occurred.	1. Turn the printer off and then on. 2. If the message persists, contact HP Support.
68.X PERMANENT STORAGE FULL alternates with **To continue press ✓**	A non-volatile storage device is full. Press ✓ to clear the message. Printing can continue, but unexpected behavior could result. X Description 0 Onboard NVRAM	1. Press ✓ to continue. 2. For 68.0 errors, turn the printer off and then on. 3. If a 68.0 error persists, contact HP Support.
68.X PERMANENT STORAGE WRITE FAIL alternates with **To continue press ✓**	A non-volatile storage device is full. Press ✓ to clear the message. Printing can continue, but unexpected behavior could result. X Description 0 Onboard NVRAM	1. Press ✓ to continue. 2. If the problem persists, contact HP Support.
68.X STORAGE ERROR SETTINGS CHANGED alternates with **To continue press ✓**	A non-volatile storage device is full. Press ✓ to clear the message. Printing can continue, but unexpected behavior could result. X Description 0 Onboard NVRAM	1. Press ▼ to view step-by-step information. 2. To clear the error, press ? to exit the message, and then press ✓ to continue. 3. If the problem persists, turn the printer off and then on. 4. If the message persists, contact HP Support. 5. To exit, press ?.
79.XXXX ERROR alternates with **To continue turn off then on**	A critical hardware error has occurred.	1. Turn the printer off and then on. 2. If the problem persists, contact HP Support.
<Date> <Time>	The printer has an internal clock that tracks the date and time. You are prompted to set	Press ✓ to change the date and time.

Control panel message	Description	Recommended action
To change press ✓ **To skip, press STOP**	the correct date and time the first time you turn on the printer.	Press Stop to skip this step. You can set the date and time later by using the **SYSTEM SETUP** menu. If the prompt appears each time you turn on the printer, the clock is not working correctly. Contact HP support.
Access Denied MENUS LOCKED	The printer administrator has enabled the control-panel security mechanism. You cannot modify control-panel settings in this circumstance. The message disappears after a few seconds, and the printer returns to **Ready** or **BUSY** state.	Contact the printer administrator to change settings.
ACTION NOT CURRENTLY AVAILABLE ON TRAY X alternates with **Tray size cannot be ANY SIZE/ANY CUSTOM**	You are trying to set duplex registration for a tray that is configured for **ANY SIZE** or **ANY CUSTOM**. Duplex registration is not available when the tray size is set to either of these settings.	Change the size setting for the tray.
BAD DUPLEXER CONNECTION alternates with **To continue turn off then on**	The duplexer is not installed correctly.	Turn the printer off and then on to continue.
Calibrating...	The printer is calibrating.	No action necessary.
Canceling... <JOB NAME>	The printer is in the process of canceling a job. The message appears while the job is stopped, the paper path is flushed, and any remaining incoming data on the active data channel is received and discarded.	No action necessary.
Checking paper path	The engine is turning the rollers to check for possible jams.	No action necessary.
Checking printer	The engine is performing an internal test.	No action necessary.
CHOSEN PERSONALITY NOT AVAILABLE alternates with **To continue press ✓**	The printer encountered a request for a personality that did not exist in the printer. The job is cancelled and no pages are printed.	1. Press ✓ to continue. 2. Try a different driver.
CLEANING DISK X% COMPLETE alternates with **DO NOT POWER OFF**	The memory disk is being cleaned. This process might take up to an hour. During this time, no jobs can be printed.	Do not turn off the printer. Wait for the process to complete. The printer automatically restarts at the end of the cleaning process.
Cleaning...	The printer is processing the cleaning page.	No action necessary.
Clearing event log	This message appears while the event log is cleared. The printer then returns to the **SERVICE** menu.	No action necessary.
Clearing paper path	The printer jammed or detected misplaced media. The printer is attempting to eject these pages automatically.	No action necessary.

Control panel message	Description	Recommended action
CLOSE TOP COVER AND FRONT DOOR	The top cover and front door need to be closed.	Close the top cover and front door.
CODE CRC ERROR	An error has occurred during a firmware upgrade.	1. Reinstall the firmware. 2. If the problem persists, contact HP Support.
Creating...CLEANING PAGE	The printer is generating a cleaning page. The printer returns to the **Ready** state after the cleaning page is printed.	1. Load the cleaning page into tray 1. 2. Press Menu. 3. Select **PRINT QUALITY**, and then press ✓. 4. Select **PROCESS CLEANING PAGE**, and then press ✓.
DATA RECEIVED alternates with **Ready**	The printer received data and is waiting for a form feed. When the printer receives another file, the message disappears. The printer is paused.	If the printer is waiting for a form feed, press ✓ to continue. If the printer is paused, press Stop to continue.
Event Log Empty	**SHOW EVENT LOG** was selected from the control panel, and the event log is empty.	No action necessary.
Genuine HP supplies installed	A new HP cartridge has been installed. The printer returns to the **Ready** state after approximately 10 seconds.	No action necessary.
GENUINE HP SUPPLIES DESIGNED FOR <PROD> alternates with **Ready**	This genuine HP supply was not designed for this printer and is not supported. The printer can print with this supply, but print quality might be affected.	Replace this supply with a genuine HP supply that is designed for this printer.
Incorrect	The PIN number is incorrect.	Contact the network administrator.
INFLATE FAILURE	An error has occurred during a firmware upgrade.	1. Reinstall the firmware. 2. If the problem persists, contact HP Support.
Initializing	This message appears when the printer is turned on and begins initialization.	No action necessary.
Initializing permanent storage	This message appears when the printer is turned on to show that permanent storage is being initialized.	No action necessary.
INSERT OR CLOSE TRAY XX	A tray is open and the printer is trying to print from another tray.	Close the tray indicated so that printing can continue.
INSTALL FUSER **For help press ?**	The fuser is either not installed or not correctly installed in the printer.	Press ? for help. or Contact HP Customer Support or your authorized HP service provider.
INSUFFICIENT MEMORY TO LOAD FONTS/DATA	This message alternates with the name of the storage device. The storage device	Press ✓ to continue printing without using the data.

Control panel message	Description	Recommended action
	does not have enough memory to load the fonts or other data.	To solve the problem, increase the amount of memory for the device. Press ? for more information.
LOAD TRAY X <TYPE> <SIZE> alternates with **For help press ?**	Tray X is either empty or configured for a type and size other than that specified in the job. No other tray is available.	Press ? for help. or See Configuring trays for more information.
LOAD TRAY X <TYPE> <SIZE> alternates with **To use another tray press ✓**	Tray X is either empty or configured for a type and size other than that specified in the job.	Press ? for help. or Press ✓ to print from another tray. See Configuring trays for more information.
Loading program X alternates with **DO NOT POWER OFF**	Programs and fonts can be stored on the printer file system and are loaded into RAM when the printer is turned on. The number X specifies a sequence number indicating the current program being loaded.	No action necessary.
MANUALLY FEED <TYPE> <SIZE> alternates with **For help press ?**	Tray 1 is empty and no other tray is available.	Load media into tray 1, and press ✓ to continue. Press ? for help. or See Configuring trays for more information.
MANUALLY FEED <TYPE> <SIZE> alternates with **To continue press ✓**	Media is in tray 1, but the print job requires a specific type and size that is not currently available.	Press ✓ to print from the tray. or Press ? for help. or See Configuring trays for more information.
MANUALLY FEED <TYPE> <SIZE> alternates with **To use another tray press ✓**	No media is in tray 1, and a print job requires a specific type and size that is available in another tray.	Press ✓ to print from another tray. See Configuring trays for more information. or Press ? for help.
MANUALLY FEED OUTPUT STACK alternates with **Then press ✓ to print second sides**	The first side of a manual two-sided print job has been printed and the printer is paused until for the output stack is reinserted.	Take the printed stack out of the output bin and reinsert it in tray 1 to print the second side of the two-sided print job. Press ✓ to continue. See Printing on both sides (duplexing) for more information.
MEM TEST FAILURE REPLACE DIMM 1	The memory DIMM has failed.	Install a supported memory DIMM. See Installing printer memory.
Moving solenoid alternates with **To exit press STOP key**	The printer is testing a solenoid.	No action necessary.

Control panel message	Description	Recommended action
NON HP SUPPLY IN USE alternates with **Ready**	The printer has detected that a non-HP supply is currently installed but ✓ was pressed to override the message.	If you believe you purchased an HP supply, go to www.hp.com/go/anticounterfeit. Service or repairs that are required as a result of using non-HP supplies are not covered under HP warranty.
NON HP SUPPLY INSTALLED alternates with **For help press ?**	A new, non-HP supply has been installed. This message appears until an HP supply is installed or you press ✓.	If you believe you purchased an HP supply, go to www.hp.com/go/anticounterfeit. Service or repairs that are required as a result of using non-HP supplies are not covered under HP warranty. To continue printing, press ✓.
PAPER PATH JAM FRONT DOOR alternates with **For help press ?**	A page is jammed in the paper path.	Open the front door and remove any jammed media.
Paused alternates with **To return to Ready press the STOP key**	The printer has paused.	Press Stop to resume printing.
Performing upgrade	A firmware upgrade is in process.	No action necessary. Do not turn off the printer.
Performing... PAPER PATH TEST	The printer is performing a paper-path test.	No action necessary.
PRINTING STOPPED **To continue press ✓**	This message appears when a Print/Stop test runs and the time expires.	Press ✓ to continue printing.
Printing... CONFIGURATION	The printer is generating the configuration page. The printer will return to the **Ready** state when the page has printed.	No action necessary.
Printing... DIAGNOSTICS PAGE	The printer is generating the diagnostics page. The printer will return to the **Ready** state when the page has printed.	No action necessary.
Printing... EVENT LOG	The printer is generating the event log page. The printer will return to the **Ready** state when the page has printed.	No action necessary.
Printing... FONT LIST	The printer is generating either the PCL or PS personality typeface list. The printer will return to the **Ready** state when the page has printed.	No action necessary.
Printing... MENU MAP	The printer is generating the printer menu map. The printer will return to the **Ready** state when the page has printed.	No action necessary.
Printing... REGISTRATION PAGE	The printer is generating the registration page. The printer will return to the **SET REGISTRATION** menu when the page has printed.	Follow the instructions on the printed pages.

Control panel message	Description	Recommended action
Printing... SUPPLIES STATUS	The printer is generating the supplies status page. The printer will return to the **Ready** state when the page has printed.	No action necessary.
Printing... USAGE PAGE	The printer is generating the usage page. The printer will return to the online **Ready** state when the page has printed.	No action necessary.
Processing...	The printer is currently processing a job but is not yet picking pages. When the media begins to move, this message is replaced by a message that indicates which tray the job is being printed from.	No action necessary.
Processing... from tray<X>	The printer is actively processing a job from the designated tray.	No action necessary.
Receiving upgrade	A firmware upgrade is in progress.	Do not turn the printer off until the printer returns to **Ready**.
Request accepted please wait	The printer has accepted a request to print an internal page, but the current job must finish printing before the internal page will print.	No action necessary.
Resend upgrade	The firmware upgrade was not successful.	Attempt the upgrade again.
Restoring factory settings	The printer is restoring factory settings.	No action necessary.
Restoring...	The printer is restoring settings.	No action necessary.
RFU LOAD ERROR	An error has occurred during a firmware upgrade.	1. Reinstall the firmware. 2. If the problem persists, contact HP Support.
Rotating motor alternates with **To exit press STOP key**	The printer is testing a motor.	Press Stop to stop this test.
SANITIZING DISK X% COMPLETE alternates with **DO NOT POWER OFF**	The memory disk is being sanitized. This process might take up to an hour. During this time, no jobs can be printed.	Do not turn off the printer. Wait for the process to complete. The printer automatically restarts at the end of the sanitation process.
Setting saved	A menu selection has been saved.	No action necessary.
SIZE MISMATCH IN TRAY XX alternates with **Ready**	The tray is loaded with a media size that is different than the size for which the tray is configured. Printing can continue from other trays, but not from this one.	1. Make sure the media guides are adjusted correctly. 2. In the **PAPER HANDLING** menu, configure the tray for the correct size.
Sleep mode on	The printer is in the sleep mode. Any button press or the receipt of data clears sleep mode.	No action necessary. The printer automatically exits sleep mode.
STANDARD TOP BIN FULL alternates with **Remove all paper from bin**	The output bin is full. Printing cannot continue.	Empty the output bin. Printing resumes automatically.

Control panel message	Description	Recommended action
Tray X <TYPE> <SIZE> alternates with **To change size or type press ✓**	The printer is reporting the current configuration of tray X.	No action necessary. Press ↩ to clear the message. Press ✓ to change the type or size. See Configuring trays for more information.
TRAY XX EMPTY <TYPE> <SIZE> alternates with **Ready**	The tray is empty, but the current print job does not require this tray.	Fill the tray. The message indicates the type and size of media for which the tray is currently configured.
TRAY XX OPEN **For help press ?** alternates with **Ready**	The tray is open, but printing can continue.	Close the tray.
TRAY XX OPEN OR EMPTY alternates with **Ready**	The tray is open or empty, but the current print job does not require this tray.	Close or fill the tray.
TYPE MISMATCH IN TRAY XX alternates with **Ready**	The tray is loaded with a media type that is different than the type for which the tray is configured. Printing can continue from other trays, but not from this one.	In the **PAPER HANDLING** menu, configure the tray for the correct type.
Unauthorized supply in use alternates with **Ready**	The printer has detected that a non-HP supply is currently installed and ✓ (override) was pressed.	If you believe you purchased an HP supply, go to www.hp.com/go/anticounterfeit. Service or repairs required as a result of using non-HP supplies are not covered under HP warranty.
USE TRAY X <TYPE> <SIZE>trays	The printer is offering a selection of alternate media to use for the print job.	1. Use ▲ and ▼ to highlight a different size or type, and then press ✓ to select the size or type. 2. Press ↩ to return to the previous size or type. See Configuring trays for more information.

Guidelines for using paper

For best results, make sure the paper is of good quality, and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, and curled or bent edges.

If you are unsure what type of paper you are loading (such as bond or recycled), check the label on the package of paper.

For a complete list of supported media, see Supported media sizes.

The following problems with paper cause print quality deviations, jamming, or even damage to the printer.

Symptom	Problem with paper	Solution
Poor print quality or toner adhesion	The paper is too moist, too rough, too heavy, too smooth, or it is embossed or from a faulty paper lot.	Try another kind of paper, between 100 and 250 Sheffield, and with 4 to 6% moisture content.
Dropouts, jamming, curl	The paper has been stored incorrectly. The paper varies from side to side.	Store paper flat in its moisture-proof wrapping. Turn the paper over.
Excessive curl	The paper is too moist, has the wrong grain direction, or is of short-grain construction. The paper varies from side to side.	Open the rear output bin, or use long-grain paper. Turn the paper over.
Jamming, damage to printer	The paper has cutouts or perforations.	Use paper that is free of cutouts or perforations.
Problems with feeding	The paper has ragged edges, or it is from a faulty paper lot. The paper varies from side to side. The paper is too moist, too rough, too heavy, or too smooth. It has the wrong grain direction, is of short-grain construction, or it is embossed.	Use high-quality paper that is made for laser printers. Turn the paper over. Try another kind of paper, between 100 and 250 Sheffield, and with 4 to 6% moisture content. Open the rear output bin, or use long-grain paper.

NOTE Do not use letterhead paper that is printed with low-temperature inks, such as those used in some types of thermography. Do not use raised or embossed letterhead. The printer uses heat and pressure to fuse toner to the paper. Make sure that any colored paper or preprinted forms use inks that are compatible with this fusing temperature (200°C or 392°F for 0.1 second).

CAUTION Failure to follow these guidelines could cause jams or damage to the printer.

Printing special pages

Special pages within the memory of the printer can help you to diagnose and learn about problems with your printer.

- **Configuration page**

  The configuration page lists many of the current settings and properties of the printer. For information about how to print the configuration page, see Using printer information pages. If you have an HP Jetdirect print server installed, a second page prints that lists all of the HP Jetdirect information.

- **Font list**

  You can print a font list using the control panel (see Using printer information pages) or, for Macintosh computers, the HP Printer Utility (see Using the HP Printer Utility for Macintosh).

- **Supplies status page**

  Use the supplies status page to obtain information about the print cartridge that is installed in the printer, the amount of life that remains in the print cartridge, and the number of pages and jobs that have been processed (see Using printer information pages).

- **Show Me How pages**

  Use the **SHOW ME HOW** control-panel menu to print pages that contain information about jams, loading trays, supported media types and sizes, and more help. See Show Me How menu.

Common causes of jams

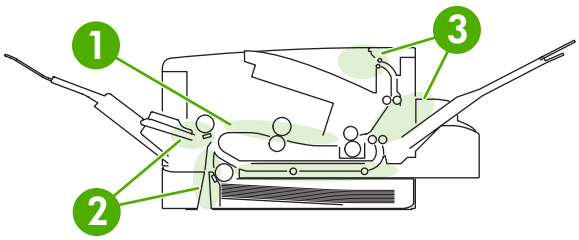
The printer is jammed.[1]

Cause	Solution
The media does not meet specifications.	Use only media that meets HP specifications. See Paper specifications.
A component is installed incorrectly.	Verify that all print cartridges, the transfer unit, and the fuser are correctly installed.
You are using media that has already passed through a printer or copier.	Do not use media that has been previously printed on or copied.
An input tray is loaded incorrectly.	Remove any excess media from the input tray. Make sure that the stack is below the maximum stack height mark in the tray. See Configuring trays.
The media is skewed.	The input-tray guides are not adjusted correctly. Adjust them so they hold the stack firmly in place without bending it.
The media is binding or sticking together.	Remove the media, flex it, rotate it 180°, or flip it over. Reload the media into the input tray. **NOTE** Do not fan paper. Fanning can create static electricity, which can cause paper to stick together.
The media is removed before it settles into the output bin.	Reset the printer. Wait until the page completely settles in the output bin before removing it.
The media is in poor condition.	Replace the media.
The internal rollers from tray 2 are not picking up the media.	Remove the top sheet of media. If the media is heavier than 120 g/m^2 (32 lb), it might not be picked from the tray.
The media has rough or jagged edges.	Replace the media.
The media is perforated or embossed.	Perforated or embossed media does not separate easily. Feed single sheets from tray 1.
Printer supply items have reached the end of their useful life.	Check the printer control panel for messages prompting you to replace supplies, or print a supplies status page to verify the remaining life of the supplies. See Using printer information pages.
Paper was not stored correctly.	Replace the paper in the trays. Paper should be stored in the original packaging in a controlled environment.

[1] If the printer still continues to jam, contact HP Customer Support or your authorized HP service provider.

Jam locations

Use this illustration to troubleshoot jams in the printer. For instructions about clearing jams, see Clearing jams.



1	Print cartridge
2	Input trays
3	Output bins

Jam recovery

This printer automatically provides jam recovery, a feature that you can use to set whether the printer should attempt to automatically reprint jammed pages.

- **AUTO** instructs the printer to attempt to reprint jammed pages.
- **OFF** instructs the printer not to attempt to reprint jammed pages.

NOTE During the recovery process, the printer might reprint pages that were printed before the jam occurred. Be sure to remove any duplicated pages.

To improve print speed and increase memory resources, you might want to disable the jam recovery.

To turn off jam recovery

1. Press Menu.
2. Press ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Press ▼ to highlight **SYSTEM SETUP**, and then press ✓.
4. Press ▼ to highlight **JAM RECOVERY**, and then press ✓.
5. Press ▼ to highlight **OFF**, and then press ✓.
6. Press Menu to return to the **Ready** state.

Clearing jams

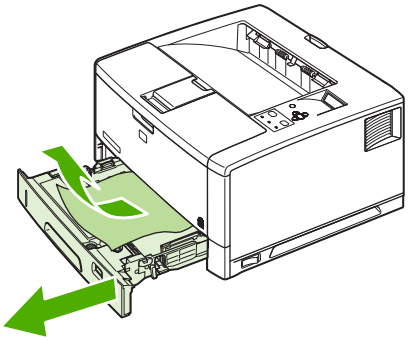
When clearing jams, be very careful not to tear the media. If a small piece of media remains in the printer, it could cause additional jams.

The **SHOW ME HOW** control-panel menu includes a page that shows how to clear jams. See Show Me How menu.

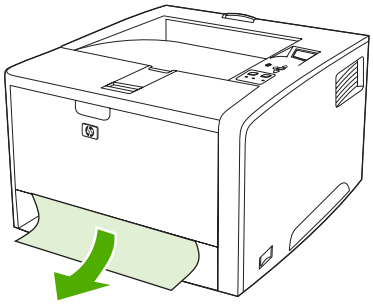
Clearing jams from the input-tray areas

NOTE To remove media from the tray 1 area, slowly pull the media out of the printer. For all other trays, complete the following procedure.

1. Slide the tray out of the printer, and remove any damaged paper from the tray.

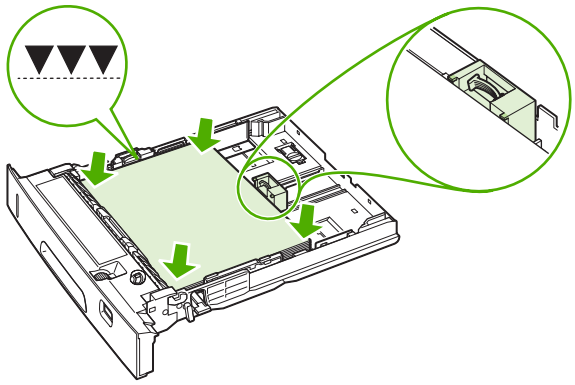


2. If the edge of the paper is visible in the feed area, slowly pull the paper down and out of the printer. If the paper is not visible, look in the top cover area.



NOTE Do not force the paper if it will not move easily. If the paper is stuck in a tray, try removing it through the tray above (if applicable) or through the top-cover area.

3. Before replacing the tray, make sure the paper is flat in the tray at all four corners and below the tabs on the guides.

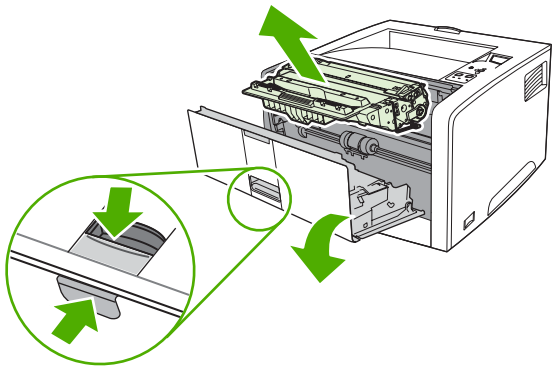


4. Open and close the top cover to clear the jam message.

If a jam message persists, there is still media in the printer. Look for media in other locations.

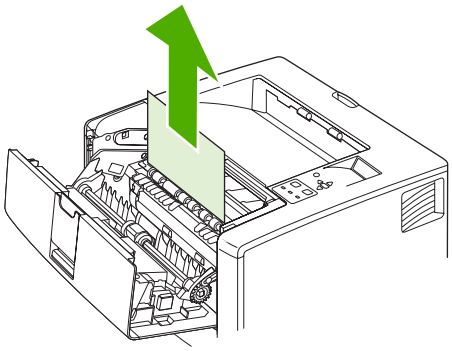
Clearing jams from the print-cartridge area

1. Open the top cover and remove the print cartridge.



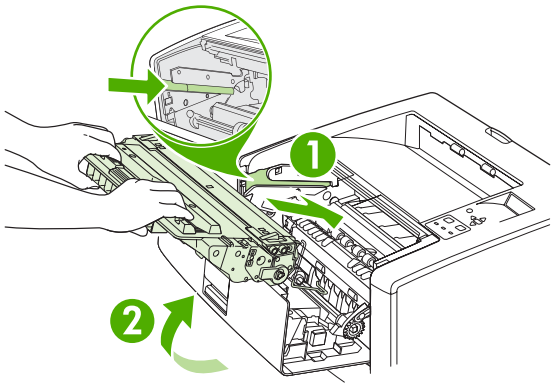
CAUTION To prevent damage to the print cartridge, do not expose it to light for more than a few minutes.

2. Slowly pull the media out of the printer. Be careful to not tear the media.



CAUTION Avoid spilling loose toner. Use a dry, lint-free cloth, to clean any toner that might have fallen into the printer. If loose toner falls into the printer, it might cause temporary problems with print quality. Loose toner should clear from the paper path after a few pages are printed. If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. (Hot water sets toner into fabric.)

3. Replace the print cartridge, and then close the top cover.

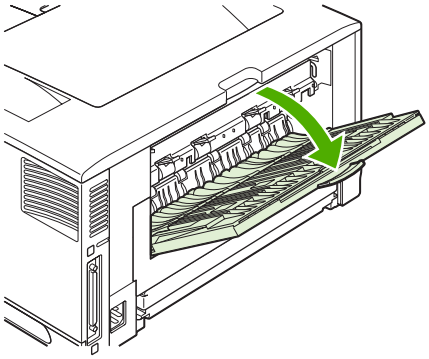


If a jam message persists, there is still media in the printer. Look for media in other locations.

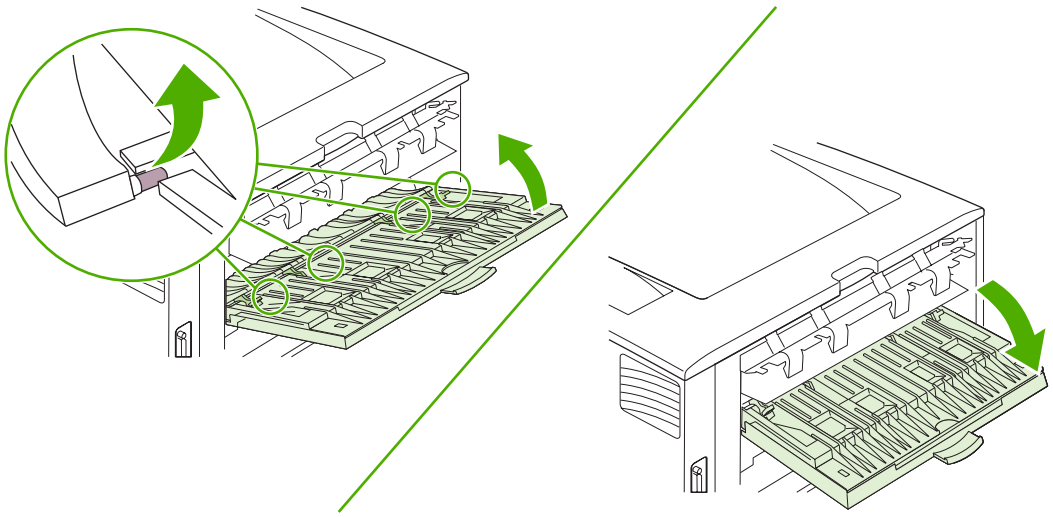
Clearing jams from the output-bin areas

NOTE If media is jammed in the top output area, but most of the media is still inside the printer, it is best to remove it through the rear door.

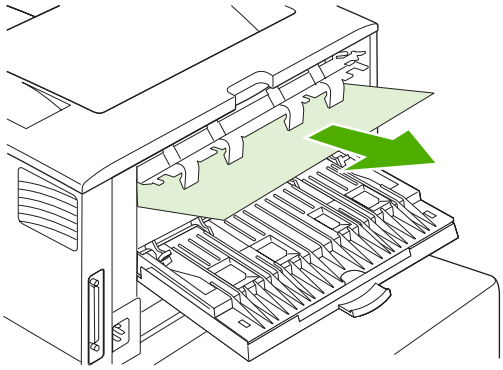
1. Open the rear door.



2. Slightly lift up the rear door, and then, on the inside of the door, lift up on the middle portion of the black assembly to release the clips. Let the rear door drop completely open.

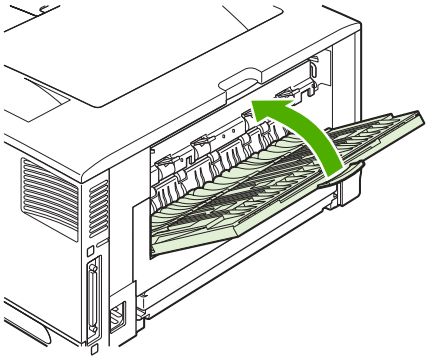


3. Grasp both sides of the media, and slowly pull the media out of the printer. (There might be loose toner on the media. Be careful not to spill it on yourself or into the printer.)



NOTE If media is difficult to remove, try opening the top cover and removing the print cartridge to release pressure on the media.

4. Close the rear door. (The clips automatically return to their original positions when the rear door is closed.)



5. Open and close the top cover to clear the jam message.

If a jam message persists, there is still media in the printer. Look for media in other locations.

Solving repeated jams

If jams occur frequently, try the following actions:

- Check all the jam locations. A piece of media might be stuck somewhere in the printer.
- Check that media is correctly loaded in the trays, that the trays are correctly adjusted for the loaded media size, and that the trays are not overfilled.
- Check that all trays and paper-handling accessories are completely inserted into the printer. (If a tray is open during a print job, a jam might occur.)
- Check that all covers and doors are closed. (If a cover or door is open during a print job, a jam might occur.)
- Try printing to a different output bin.

- The sheets might be sticking together. Try bending the stack to separate each sheet. Do not fan the stack.
- If you are printing from tray 1, try feeding fewer sheets of media at a time.
- If you are printing small sizes (such as index cards), make sure that the media is oriented correctly in the tray.
- Turn over the media stack in the tray. Also, try rotating the stack 180°.
- Try rotating media to feed through the printer from a different orientation.
- Check the media quality. Do *not* use damaged or irregular media.
- Use only media that meets HP specifications. See Paper specifications.
- Do not use media that has already been used in a printer or copier. Do not print on both sides of envelopes, transparencies, vellum, or labels.
- Do not use media with staples or media that has had the staple removed. Staples can damage the printer and can void warranty.
- Make sure that the power supplied to the printer is steady and meets printer specifications. See Specifications.
- Clean the printer. See Cleaning the printer.
- Contact an HP-authorized service or support provider to perform routine printer maintenance. See the support flyer that was included with the printer, or see HP Customer Care.

Troubleshooting print-quality problems

This section helps you define print-quality problems and what to do to correct them. Often print-quality problems can be handled easily by making sure that the printer is correctly maintained, using print media that meets HP specifications, or running a cleaning page.

Print-quality problems associated with media

Some print-quality problems arise from the use of inappropriate media.

- Use media that meets HP specifications. See Paper specifications.
- The surface of the media is too smooth. Use media that meets HP specifications. See Paper specifications.
- The moisture content is uneven, too high, or too low. Use media from a different source or from an unopened ream.
- Some areas of the media reject toner. Use media from a different source or from an unopened ream.
- The letterhead you are using is printed on rough media. Use a smoother, xerographic media. If this solves your problem, ask the supplier of your letterhead to use media that meets the specifications for this printer. See Paper specifications.
- The media is excessively rough. Use a smoother, xerographic media.
- The driver setting is incorrect. To change the media type setting, see Type and Size.
- The media that you are using is too heavy for the media type setting that you selected, and the toner is not fusing to the media.

Print-quality problems associated with the environment

If the printer is operating in excessively humid or dry conditions, verify that the printing environment is within specifications. See the printer getting started guide for operating-environment specifications.

Print-quality problems associated with jams

Make sure that all sheets are cleared from the paper path. See Jam recovery.

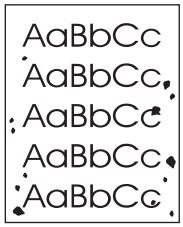
- If the printer recently jammed, print two to three pages to clean the printer.
- If the sheets do not pass through the fuser and cause image defects on subsequent documents, print three pages to clean the printer. If the problem persists, print and process a cleaning page. See Cleaning the printer.

Image defect examples

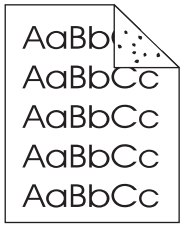
Use the examples in this image-defect table to determine which print-quality problem you are experiencing, and then see the corresponding reference pages to troubleshoot. These examples identify the most common print-quality problems. If you still have problems after trying the suggested remedies, contact HP Customer Support. (See HP Customer Care.)

See Light print (partial page)

See Light print (entire page)

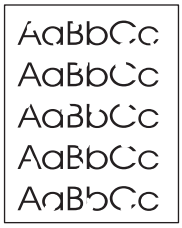


See Specks

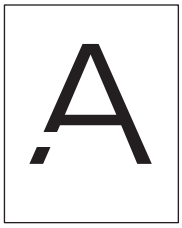


See Specks

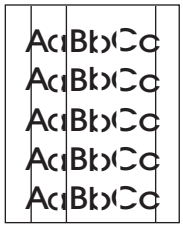
See Dropouts



See Dropouts

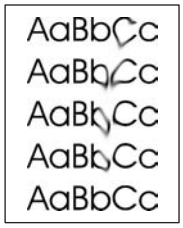


See Dropouts

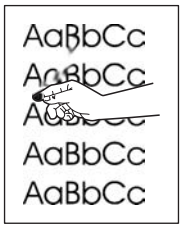


See Lines

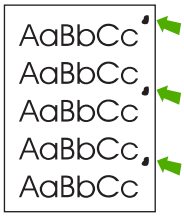
See Gray background



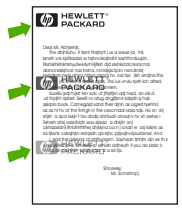
See Toner smear



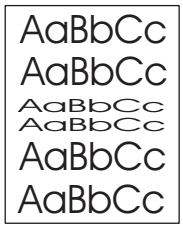
See Loose toner



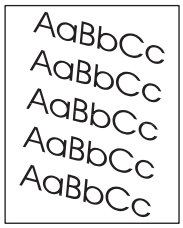
See Repeating defects



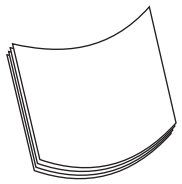
See Repeating image



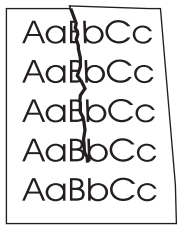
See Misformed characters



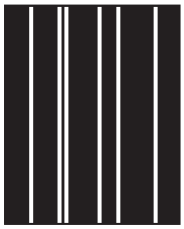
See Page skew



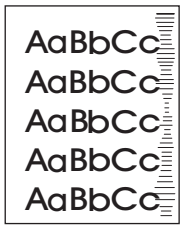
See Curl or wave



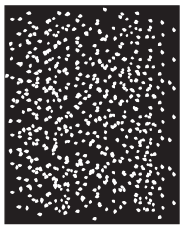
See Wrinkles or creases



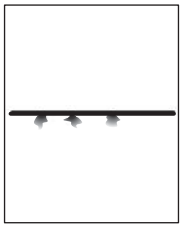
See Vertical white lines



See Tire tracks



See White spots on black



See Scattered lines.

See Blurred print.

See Random image repetition (dark)

See Random image repetition (light)

NOTE These examples depict letter-size media that has passed through the printer short-edge-first.

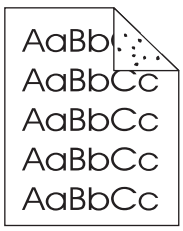
Light print (partial page)

1. Make sure that the print cartridge is fully installed.
2. The toner level in the print cartridge might be low. Replace the print cartridge.
3. The media might not meet HP specifications (for example, the media is too moist or too rough). See Paper specifications.

Light print (entire page)

1. Make sure that the print cartridge is fully installed.
2. Make sure that the **ECONOMODE** setting is turned off at the control panel and in the printer driver.
3. Open the **CONFIGURE DEVICE** menu at the printer control panel. Open the **PRINT QUALITY** submenu and increase the **TONER DENSITY** setting. See Print Quality submenu.
4. Try using a different type of media.
5. The print cartridge might be almost empty. Replace the print cartridge.

Specks



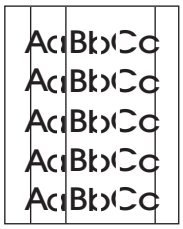
Specks might appear on a page after a jam has been cleared.

1. Print a few more pages to see if the problem corrects itself.
2. Clean the inside of the printer and run a cleaning page to clean the fuser. (See Cleaning the printer.)
3. Try using a different type of media.
4. Check the print cartridge for leaks. If the print cartridge is leaking, replace it.

Dropouts

1. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)
2. If the media is rough, and the toner easily rubs off, open the **CONFIGURE DEVICE** menu at the printer control panel. Open the **PRIT QUALITY** submenu, select **FUSER MODES**, and then select the media type you are using. Change the setting to **HIGH1** or **HIGH2**, which helps the toner fuse more completely onto the media. (See Print Quality submenu.)
3. Try using a smoother media.

Lines

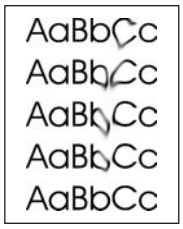


1. Print a few more pages to see if the problem corrects itself.
2. Clean the inside of the printer and run a cleaning page to clean the fuser. (See Cleaning the printer.)
3. Replace the print cartridge.

Gray background

1. Do not use media that has already been run through the printer.
2. Try using a different type of media.
3. Print a few more pages to see if the problem corrects itself.
4. Turn over the stack in the tray. Also, try rotating the stack 180°.
5. Open the **CONFIGURE DEVICE** menu at the printer control panel. On the **PRINT QUALITY** submenu, increase the **TONER DENSITY** setting. See Print Quality submenu.
6. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)
7. Replace the print cartridge.

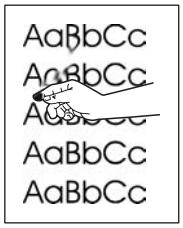
Toner smear



1. Print a few more pages to see if the problem corrects itself.
2. Try using a different type of media.
3. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)
4. Clean the inside of the printer and run a cleaning page to clean the fuser. (See Cleaning the printer.)
5. Replace the print cartridge.

Also see Loose toner.

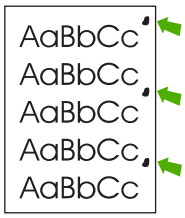
Loose toner



Loose toner, in this context, is defined as toner that can be rubbed off the page.

1. If media is heavy or rough, open the **CONFIGURE DEVICE** menu at the printer control panel. On the **PRINT QUALITY** submenu, select **FUSER MODES**, and then select the media type you are using. Change the setting to **HIGH1** or **HIGH2**, which helps the toner fuse more completely onto the media. (See Print Quality submenu.) You must also set the type of media for the tray you are using. (See Controlling print jobs.)
2. If you have observed a rougher texture on one side of your media, try printing on the smoother side.
3. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)
4. Make sure that type and quality of the media you are using meet HP specifications. (See Paper specifications.)

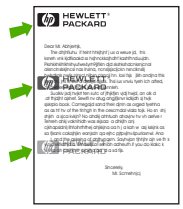
Repeating defects



1. Print a few more pages to see if the problem corrects itself.
2. If the distance between defects is 44 mm (1.7 in), 58 mm (2.3 in), or 94 mm (3.7 in), the print cartridge might need to be replaced.
3. Clean the inside of the printer and run a cleaning page to clean the fuser. (See Cleaning the printer.)

Also see Repeating image.

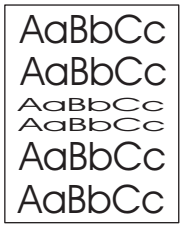
Repeating image



This type of defect might occur when using preprinted forms or a large quantity of narrow media.

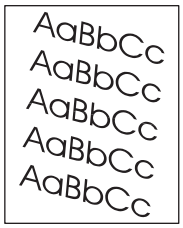
1. Print a few more pages to see if the problem corrects itself.
2. Make sure that type and quality of the media you are using meet HP specifications. (See Paper specifications.)
3. If the distance between defects is 44 mm (1.7 in), 58 mm (2.3 in), or 94 mm (3.7 in), the print cartridge might need to be replaced.

Misformed characters



1. Print a few more pages to see if the problem corrects itself.
2. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)

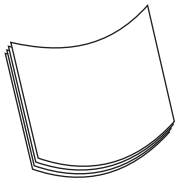
Page skew



1. Print a few more pages to see if the problem corrects itself.
2. Verify that no torn pieces of media are inside the printer.
3. Make sure that media is loaded correctly and that all adjustments have been made. (See Configuring trays.) Make sure that the guides in the tray are not too tight or too loose against the media.

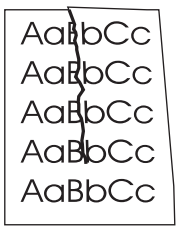
4. Turn over the stack in the tray. Also, try rotating the stack 180°.
5. Make sure that the type and quality of the media you are using meet HP specifications. (See Paper specifications.)
6. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)

Curl or wave



1. Turn over the stack in the tray. Also, try rotating the stack 180°.
2. Make sure that the type and quality of the media you are using meet HP specifications. (See Paper specifications.)
3. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)
4. Try printing to a different output bin.
5. If media is lightweight and smooth, open the **CONFIGURE DEVICE** menu at the printer control panel. On the **PRINT QUALITY** submenu, select **FUSER MODES**, and then select the media type you are using. Change the setting to **LOW**, which helps reduce the heat in the fusing process. (See Print Quality submenu.) You must also set the type of media for the tray you are using. (See Controlling print jobs.)

Wrinkles or creases



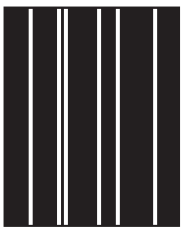
1. Print a few more pages to see if the problem corrects itself.
2. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)
3. Turn over the stack in the tray. Also, try rotating the stack 180°.
4. Make sure that media is loaded correctly and all adjustments have been made. (See Configuring trays.)

5. Make sure that the type and quality of the media you are using meet HP specifications. (See Paper specifications.)
6. If envelopes are creasing, try storing envelopes so that they lie flat.

If the above actions do not improve wrinkles or creases, change your fuser mode from **NORMAL** to **LOW1**.

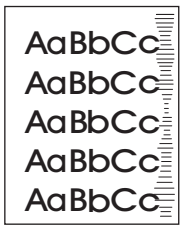
1. On the control panel, press Menu.
2. Use ▼ to highlight **CONFIGURE DEVICE**, and then press ✓.
3. Use ▼ to highlight **PRINT QUALITY**, and then press ✓.
4. Use ▼ to highlight **FUSER MODES**, and then press ✓.
5. Use ▼ to highlight **LOW1**, and then press ✓.

Vertical white lines



1. Print a few more pages to see if the problem corrects itself.
2. Make sure that the type and quality of the media you are using meet HP specifications. (See Paper specifications.)
3. Replace the print cartridge.

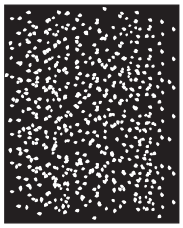
Tire tracks



This defect typically occurs when the print cartridge has far exceeded its rated life. For example, if you are printing a very large quantity of pages with very little toner coverage.

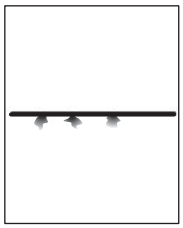
1. Replace the print cartridge.
2. Reduce the number of pages that you print with very low toner coverage.

White spots on black



1. Print a few more pages to see if the problem corrects itself.
2. Make sure that the type and quality of the media you are using meet HP specifications. (See Paper specifications.)
3. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)
4. Replace the print cartridge.

Scattered lines



1. Make sure that the type and quality of the media you are using meet HP specifications. (See Paper specifications.)
2. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)
3. Turn over the stack in the tray. Also, try rotating the stack 180°.
4. Open the **CONFIGURE DEVICE** menu at the printer control panel. Open the **PRINT QUALITY** submenu and change the **TONER DENSITY** setting. (See Print Quality submenu.)
5. Open the **CONFIGURE DEVICE** menu at the printer control panel. On the **PRINT QUALITY** submenu, open **OPTIMIZE** and set **LINE DETAIL=ON**.

Blurred print

1. Make sure that the type and quality of the media you are using meet HP specifications. (See Paper specifications.)
2. Make sure that the environmental specifications for the printer are being met. (See Operating environment.)
3. Turn over the stack in the tray. Also, try rotating the stack 180°.
4. Do not use media that already has been run through the printer.
5. Decrease the toner density. Open the **CONFIGURE DEVICE** menu at the printer control panel. Open the **PRINT QUALITY** submenu and change the **TONER DENSITY** setting. (See Print Quality submenu.)
6. Open the **CONFIGURE DEVICE** menu at the printer control panel. On the **PRINT QUALITY** submenu, open **OPTIMIZE** and set **HIGH TRANSFER=ON**. (See Print Quality submenu.)

Random image repetition

If an image that appears at the top of the page (in solid black) repeats further down the page (in a gray field), the toner might not have been completely erased from the last job. (The repeated image might be lighter or darker than the field it appears in.)

- Change the tone (darkness) of the field that the repeated image appears in.
- Change the order in which the images are printed. For example, have the lighter image at the top of the page, and the darker image farther down the page.

- From your software program, rotate the whole page 180° to print the lighter image first.
- If the defect occurs later in a print job, turn the printer off for 10 minutes, and then turn it on to restart the print job.

Troubleshooting common Windows problems

Error message:

"Error Writing to LPT*x*" in Windows 9*x*.

Cause	Solution
Media is not loaded.	Make sure that paper or other print media is loaded in the trays.
The cable is defective or loose.	Make sure that the cables are connected correctly, the printer is on, and the Ready light is on.
The printer is plugged into a power strip and is not receiving enough power.	Unplug the power cord from the power strip and plug it into another electrical outlet.
The input/output setting is incorrect.	Click **Start**, click **Settings**, and then click **Printers**. Right-click the HP LaserJet 5200L printer driver and select **Properties**. Click **Details** and then click **Port Settings**. Click to clear the check mark from the **Check Port State before Printing** box. Click **OK**. Click **Spool Setting** and then click **Print Directly to Printer**. Click **OK**.

Error message:

"General Protection FaultException OE"

"Spool32"

"Illegal Operation"

Cause	Solution
	Close all software programs, restart Windows, and try again. Select a different printer driver. If the HP LaserJet 5200L PCL 6 driver is selected, switch to a PCL 5e or PS printer driver. You can usually do this from a software program. Delete all temp files from the Temp subdirectory. You can determine the name of the directory by editing the AUTOEXEC.BAT file and looking for the statement "Set Temp =". The name after this statement is the temp directory. It is usually C:\TEMP by default, but can be redefined. See the Microsoft Windows documentation that came with your computer for more information about Windows error messages.

Troubleshooting common Macintosh problems

In addition to the problems that are listed in Solving general printing problems, this section lists problems that can occur when using a Mac computer.

NOTE Setup for USB printing is performed through the Desktop Printer Utility. The printer will *not* appear in the Chooser.

The printer driver is not listed in Print Center.

Cause	Solution
The printer software might not have been installed or was installed incorrectly.	Make sure that the HP LaserJet 5200L PPD is in the following hard drive folder: `Library/Printers/PPDs/Contents/Resources/<lang>.lproj`, where "<lang>" represents the two-letter language code for the language that you are using. If necessary, reinstall the software. See the getting started guide for instructions.
The Postscript Printer Description (PPD) file is corrupt.	Delete the PPD file from the following hard drive folder: `Library/Printers/PPDs/Contents/Resources/<lang>.lproj`, where "<lang>" represents the two-letter language code for the language that you are using. Reinstall the software. See the getting started guide for instructions.

The printer name does not appear in the printer list box in the Print Center.

Cause	Solution
The printer might not be ready.	Make sure that the cables are connected correctly, the printer is on, and the ready light is on.
The wrong connection type might be selected.	Make sure that USB is selected as the type of connection that exists between the printer and the computer.
The wrong printer name is being used.	Check the printer name by printing a configuration page See Using printer information pages. Verify that the name on the configuration page matches the printer name in the Print Center.
The interface cable might be defective or of poor quality.	Replace the interface cable. Make sure to use a high-quality cable.

The printer driver does not automatically set up your selected printer in Print Center.

Cause	Solution
The printer might not be ready.	Make sure that the cables are connected correctly, the printer is on, and the ready light is on.
The printer software might not have been installed or was installed incorrectly.	Make sure that the HP LaserJet 5200L PPD is in the following hard drive folder: `Library/Printers/PPDs/Contents/Resources/<lang>.lproj`, where "<lang>" represents the two-letter language code for the language that you are using. If necessary, reinstall the software. See the getting started guide for instructions.

The printer driver does not automatically set up your selected printer in Print Center.

Cause	Solution
The Postscript Printer Description (PPD) file is corrupt.	Delete the PPD file from the following hard drive folder: `Library/Printers/PPDs/Contents/Resources/<lang>.lproj`, where “<lang>” represents the two-letter language code for the language that you are using. Reinstall the software. See the getting started guide for instructions.
The printer might not be ready.	Make sure that the cables are connected correctly, the printer is on, and the ready light is on.
The interface cable might be defective or of poor quality.	Replace the interface cable. Make sure to use a high-quality cable.

A print job was not sent to the printer that you wanted.

Cause	Solution
The print queue might be stopped.	Restart the print queue. Open **print monitor** and select **Start Jobs**.
The wrong printer name is being used. Another printer with the same or similar name might have received your print job.	Check the printer name by printing a configuration page See Using printer information pages. Verify that the name on the configuration page matches the printer name in the Print Center.

An encapsulated PostScript (EPS) file does not print with the correct fonts.

Cause	Solution
This problem occurs with some programs.	• Try downloading the fonts that are contained in the EPS file to the printer before printing. • Send the file in ASCII format instead of binary encoding.

You are unable to print from a third-party USB card.

Cause	Solution
This error occurs when the software for USB printers is not installed.	When adding a third-party USB card, you might need the Apple USB Adapter Card Support software. The most current version of this software is available from the Apple Web site.

When connected with a USB cable, the printer does not appear in the Macintosh Print Center after the driver is selected.

Cause	Solution
This problem is caused by either a software or a hardware component.	**Software troubleshooting** • Check that your Macintosh supports USB. • Verify that your Macintosh operating system is Mac OS X V10.1 or later. • Ensure that your Macintosh has the appropriate USB software from Apple. **Hardware troubleshooting** • Check that the printer is turned on. • Verify that the USB cable is connected correctly. • Check that you are using the appropriate high-speed USB cable. • Ensure that you do not have too many USB devices drawing power from the chain. Disconnect all of the devices from the chain, and connect the cable directly to the USB port on the host computer. • Check to see if more than two nonpowered USB hubs are connected in a row on the chain. Disconnect all of the devices from the chain and connect the cable directly to the USB port on the host computer. **NOTE** The iMac keyboard is a nonpowered USB hub.

Troubleshooting Linux problems

For information about Linux problem solving, go to the HP Linux support Web site: hp.sourceforge.net/.

Troubleshooting common PostScript problems

The following situations are specific to the PostScript (PS) language and might occur when several printer languages are being used. Check the control-panel display for messages that might help resolve problems.

NOTE To receive a printed or screen message when PS errors occur, open the **Print Options** dialog box and click the selection next to the PS Errors section that you want.

General problems

The job prints in Courier (the printer default typeface) instead of the typeface that you requested.

Cause	Solution
The requested typeface is not downloaded.	Download the font that you want and send the print job again. Verify the type and location of the font. Download the font to the printer if applicable. Check the software documentation for more information.

A legal page prints with clipped margins.

Cause	Solution
The print job was too complex.	Reduce the complexity of the page, or install more memory.

A PS error page prints.

Cause	Solution
The print job might not be PS.	Make sure that the print job is a PS job. Check to see whether the software program expected a setup or PS header file to be sent to the printer.

A Supplies and accessories

This section provides information about ordering parts, supplies, and accessories. Use only parts and accessories that are specifically designed for this printer.

- Ordering parts, accessories, and supplies
- Part numbers

Ordering parts, accessories, and supplies

Several methods are available for ordering parts, supplies, and accessories:

Ordering directly from HP

You can obtain the following items directly from HP:

- **Replacement parts** To order replacement parts in the U.S. see http://www.hp.com/go/hpparts/. Outside the United States, order parts by contacting your local authorized HP service center.
- **Supplies and accessories** To order supplies in the U.S., see http://www.hp.com/go/ljsupplies. To order supplies worldwide, see http://www.hp.com/ghp/buyonline.html. To order accessories, see www.hp.com/support/lj5200l.

Ordering through service or support providers

To order a part or accessory, contact an HP-authorized service or support provider. (See HP Customer Care.)

Ordering directly through the HP Easy Printer Care software

Use the HP Easy Printer Care software to order supplies and accessories directly from the computer. Click **Supplies Ordering**, and then click **Shop Online for Supplies**.

Part numbers

The following list of accessories was current at the time of printing. Ordering information and availability of the accessories might change during the life of the printer.

Print cartridge

Item	Description	Part number
HP LaserJet print cartridge	12,000-page cartridge	Q7516A

Memory

Item	Description	Part number
100-pin 133 MHz DDR DIMM Boosts the ability of the printer to handle large or complex print jobs.	32 MB	Q7713A
	48 MB	Q7714A
	64 MB	Q7715A
	128 MB	Q7718A

Cables and interfaces

Item	Description	Part number
Parallel cables	2-meter IEEE 1284-B cable	C2950A
	3-meter IEEE 1284-B cable	C2951A
USB cable	2-meter A to B cable	C6518A

Print media

For more information about media supplies, go to http://www.hp.com/go/ljsupplies.

Item	Description	Part number
HP Soft Gloss laser paper For use with HP LaserJet printers. This is coated paper, good for business documents with high impact, such as brochures, sales material, and documents with graphics and photographic images. Specifications: 32 lb (120 g/m^2).	Letter (220 x 280 mm), 50 sheets/box	C4179A/Asia-Pacific countries/regions
	A4 (210 x 297 mm), 50 sheets/box	C4179B/Asia-Pacific countries/regions and Europe
HP LaserJet tough paper	Letter (8.5 x 11 in), 50 sheets to a carton	Q1298A/North America
	A4 (210 x 297 mm), 50 sheets to a carton	Q1298B/Asia-Pacific countries/regions and Europe

Item	Description	Part number
For use with HP LaserJet printers. This satin-finish paper is waterproof and tear-proof, yet doesn't compromise on print quality or performance. Use it for signs, maps, menus, and other business applications.		
HP Premium Choice LaserJet paper HP's brightest LaserJet paper. Expect spectacular color and crisp black from this paper that is extra smooth and brilliantly white. This is ideal for presentations, business plans, external correspondence and other high-value documents Specifications: 98 bright, 32 lb. (75 g/m^2).	Letter (8.5 x 11 in), 500 sheets/ream, 10-ream carton	HPU1132/North America
	Letter (8.5 x 11 in), 250 sheets/ream, 6-ream carton	HPU1732 North America
	A4 (210 x 297 mm), 5-ream carton	Q2397A/Asia-Pacific countries/regions
	A4 (210 x 297 mm), 250 sheet/ream, 5-ream carton	CHP412/Europe
	A4 (210 x 297 mm), 500 sheet/ream, 5-ream carton	CHP410/Europe
	A4 (210 x 297 mm), 160 g/m^2, 500 sheet/ream, 5-ream carton	CHP413/Europe
HP LaserJet paper For use with HP LaserJet printers. This is good for letterhead, high-value memos, legal documents, direct mail, and correspondence. Specifications: 96 bright, 24 lb (90 g/m^2).	Letter (8.5 x 11 in), 500 sheets/ream, 10-ream carton	HPJ1124/North America
	Legal (8.5 x 14 in), 500 sheets/ream, 10-ream carton	HPJ1424/North America
	A Letter (220 x 280 mm), 500 sheets/ream, 5-ream carton	Q2398A/Asia-Pacific countries/regions
	A4 (210 x 297 mm), 500 sheets/ream, 5-ream carton	Q2400A/Asia-Pacific countries/regions
	A4 (210 x 297 mm), 500 sheets/ream	CHP310/Europe
HP Printing paper For use with HP LaserJet and inkjet printers. This has been created especially for small and home offices. It is heavier and brighter than copier paper. Specifications: 92 bright, 22 lb.	Letter (8.5 x 11 in), 500 sheets/ream, 10-ream carton	HPP1122/North America and Mexico
	Letter (8.5 x 11 in), 500 sheets/ream, 3-ream carton	HPP113R/North America
	A4 (210 x 297 mm), 500 sheets/ream, 5-ream carton	CHP210/Europe
	A4 (210 x 297 mm), 300 sheets/ream, 5-ream carton	CHP213/Europe
HP Multipurpose paper For use with all office equipment-laser and inkjet printers, copiers, and fax machines. This has been created for businesses that want one paper for all their office needs. It is brighter and smoother than other office papers. Specifications: 90 bright, 20 lb (75 g/m^2).	Letter (8.5 x 11 in), 500 sheets/ream, 10-ream carton Letter (8.5 x 11 in), 500 sheets/ream, 5-ream carton Letter (8.5 x 11 in), 250 sheets/ream, 12-ream carton Letter (8.5 x 11 in), 3-hole, 500 sheets/ream, 10-ream carton Legal (8.5 x 14 in), 500 sheets/ream, 10-ream carton	HPM1120/North America HPM115R/North America HP25011/North America HPM113H/North America HPM1420/North America

Item	Description	Part number
HP Office paper For use with all office equipment-laser and inkjet printers, copiers, and fax machines. This is good for high-volume printing. Specifications: 84 bright, 20 lb (75 g/m^2).	Letter (8.5 x 11 in), 500 sheets/ream, 10-ream carton	HPC8511/North America and Mexico
	Letter (8.5 x 11 in), 3-hole, 500 sheets/ream, 10-ream carton	HPC3HP/North America
	Legal (8.5 x 14 in), 500 sheets/ream, 10-ream carton	HPC8514/North America
	Letter (8.5 x 11 in), Quick Pack; 2,500-sheet carton	HP2500S/North America and Mexico
	Letter (8.5 x 11 in), Quick Pack 3-hole; 2,500-sheet carton	HP2500P/North America
	Letter (220 x 280 mm), 500 sheets/ream, 5-ream carton	Q2408A/Asia-Pacific countries/regions
	A4 (210 x 297 mm), 500 sheets/ream, 5-ream carton	Q2407A/Asia-Pacific countries/regions
	A4 (210 x 297 mm), 500 sheets/ream, 5-ream carton	CHP110/Europe
	A4 (210 x 297 mm), Quick Pack; 2500 sheets/ream, 5-ream carton	CHP113/Europe
HP Office recycled paper For use with all office equipment-laser and inkjet printers, copiers, and fax machines. This is good for high-volume printing. Satisfies U.S. Executive Order 13101 for environmentally preferable products. Specifications: 84 bright, 20 lb, 30% post-consumer content.	Letter (8.5 x 11 in), 500 sheets/ream, 10-ream carton	HPE1120/North America
	Letter (8.5 x 11 in), 3-hole, 500 sheets/ream, 10-ream carton	HPE113H/North America
	Legal (8.5 x 14 in), 500 sheets/ream, 10-ream carton	HPE1420/North America
HP LaserJet transparencies For use only with HP LaserJet monochrome printers. For crisp, sharp text and graphics, rely on the only transparencies specifically designed and tested to work with monochrome HP LaserJet printers. Specifications: 4.3-mil thickness.	Letter (8.5 x 11 in), 50 sheets to a carton	92296T/North America, Asia-Pacific countries/regions, and Europe
	A4 (210 x 297 mm), 50 sheets to a carton	922296U/Asia-Pacific countries/regions and Europe

B Service and support

Hewlett-Packard limited warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP LaserJet 5200L printer	One-year limited warranty

HP warrants to you, the end-user customer, that HP hardware and accessories will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.

HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.

HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.

HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

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TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL,

CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries/regions, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Print cartridge, transfer unit, and fuser limited warranty statement

This HP product is warranted to be free from defects in materials and workmanship.

This warranty does not apply to products that (a) have been refilled, refurbished, remanufactured or tampered with in any way, (b) experience problems resulting from misuse, improper storage, or operation outside of the published environmental specifications for the printer product or (c) exhibit wear from ordinary use.

To obtain warranty service, please return the product to place of purchase (with a written description of the problem and print samples) or contact HP customer support. At HP's option, HP will either replace products that prove to be defective or refund your purchase price.

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TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE.

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Customer Self Repair Warranty Service

HP products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If, during the diagnosis period, HP identifies that the repair can be accomplished by the use of a CSR part, HP will ship that part directly to you for replacement. There are two categories of CSR parts: 1) Parts for which customer self repair is mandatory. If you request HP to replace these parts, you will be charged for the travel and labor costs of this service. 2) Parts for which customer self repair is optional. These parts are also designed for Customer Self Repair. If, however, you require that HP replace them for you, this may be done at no additional charge under the type of warranty service designated for your product.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same-day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the HP Technical Support Center and a technician will help you over the phone. HP specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to HP. In cases where it is required to return the defective part to HP, you must ship the defective part back to HP within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in HP billing you for the replacement. With a customer self repair, HP will pay all shipping and part return costs and determine the courier/carrier to be used.

HP maintenance agreements

HP has several types of maintenance agreements that meet a wide range of support needs. Maintenance agreements are not part of the standard warranty. Support services may vary by area. Check with your local HP dealer to determine the services available to you.

On-site service agreements

To provide you with the level of support best suited to your needs, HP has on-site service agreements with a selection of response times.

Next-day on-site service

This agreement provides support by the next working day following a service request. Extended coverage hours and extended travel beyond HP's designated service zones are available on most on-site agreements (for additional charges).

Weekly (volume) on-site service

This agreement provides scheduled weekly on-site visits for organizations with many HP products. This agreement is designated for sites using 25 or more workstation products, including printers, plotters, computers, and disk drives.

Repacking the printer

If HP Customer Care determines that your printer needs to be returned to HP for repair, follow the steps below to repack the printer before shipping it.

CAUTION Shipping damage as a result of inadequate packing is the customer's responsibility.

To repack the printer

1. Remove and retain any DIMMs that you have purchased and installed in the printer. Do not remove the DIMM that came with the printer.

   CAUTION Static electricity can damage DIMMs. When handling DIMMs, either wear an antistatic wrist strap, or frequently touch the surface of the DIMM antistatic package and then touch bare metal on the printer. To remove the DIMMs, see Installing printer memory.

2. Remove and retain the print cartridge.

   CAUTION It is *extremely important* to remove the print cartridge before shipping the printer. A print cartridge that remains in the printer during shipping will leak and entirely cover the printer engine and other parts with toner.

   To prevent damage to the print cartridge, avoid touching the roller on it, and store the print cartridge in its original packing material or so that it is not exposed to light.

3. Remove and retain the power cable and interface cable.

4. If possible, include print samples and 50 to 100 sheets of paper or other print media that did not print correctly.
5. In the U.S., call HP Customer Care to request new packing material. In other areas, use the original packing material, if possible. Hewlett-Packard recommends insuring the equipment for shipment.

Extended warranty

HP SupportPack provides coverage for the HP hardware product and all HP-supplied internal components. The hardware maintenance covers a 1- to 3-year period from date of the HP product purchase. The customer must purchase HP SupportPack within the stated factory warranty. For more information, contact the HP Customer Care Service and Support group.

C Specifications

- Physical specifications
- Electrical specifications
- Acoustic emissions
- Operating environment
- Paper specifications

Physical specifications

Table C-1 Printer dimensions

Printer model	Height	Depth	Width	Weight[1]
HP LaserJet 5200L	275 mm (10.8 in)	535 mm (21 in)	490 mm (19.3 in)	20.2 kg (44.5 lb)

1 Without print cartridge

Table C-2 Printer dimensions with all doors and trays fully opened

Printer model	Height	Depth	Width
HP LaserJet 5200L	275 mm (10.8 in)	980 mm (38.6 in)	490 mm (19.3 in)

Electrical specifications

WARNING! Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This can damage the printer and void the product warranty.

Table C-3 Power requirements

Specification	110-volt models	220-volt models
Power requirements	110 to 127 volts (± 10%)	220 to 240 volts (± 10%)
	50/60 Hz (± 2 Hz)	50/60 Hz (± 2 Hz)
Rated short-term current	7.5 Amps	4.5 Amps

Table C-4 Power consumption (average, in watts)[1]

Printer model	Printing[2]	Ready[3],[4]	Sleep[5]	Off
HP LaserJet 5200L	450 W[6]	27 W	7 W	0.5 W

1 Values subject to change. See www.hp.com/support/lj5200l for current information.
2 Power numbers are the highest values measured using all standard voltages.
3 Default time from Ready mode to Sleep = 30 minutes.
4 Heat dissipation in Ready mode = 93 BTU/hour.
5 Recovery time from Sleep to start of printing = less than 18 seconds.
6 Print speed is 25 ppm.

Acoustic emissions

Table C-5 Sound power and pressure level[1],[3]

Printing[3]	L_{WAd}=6.74 Bels (A) [67.4 dB(A)]
Ready	L_{WAd}=4.6 Bels (A) [46 dB(A)]
Sound pressure level	**Declared per ISO 9296**

Table C-5 Sound power and pressure level, (continued)

Printing[3]	L_{pAm}=53 dB (A)
Ready	L_{pAm}=31 dB (A)

1 Values subject to change. See www.hp.com/support/lj5200l for current information.
2 Configuration tested: base printer with A4 paper size.
3 Print speed is 25 ppm.

Operating environment

Table C-6 Necessary conditions

Environmental condition	Printing	Storage/standby
Temperature (printer and print cartridge)	15° to 32.5°C (59° to 89°F)	-20° to 40°C (-4° to 104°F)
Relative humidity	10% to 80%	10% to 90%

Paper specifications

For complete paper specifications for all HP LaserJet printers, see the *HP LaserJet printer family print media guide* (available at http://www.hp.com/support/ljpaperguide).

Category	Specifications
Acid content	5.5 pH to 8.0 pH
Caliper	0.094 to 0.18 mm (3.0 to 7.0 mils)
Curl in ream	Flat within 5 mm (0.02 in)
Cut edge conditions	Cut with sharp blades with no visible fray.
Fusing compatibility	Must not scorch, melt, offset, or release hazardous emissions when heated to 200° C (392°F) for 0.1 second.
Grain	Long grain
Moisture content	4% to 6% by weight
Smoothness	100 to 250 Sheffield

Envelopes

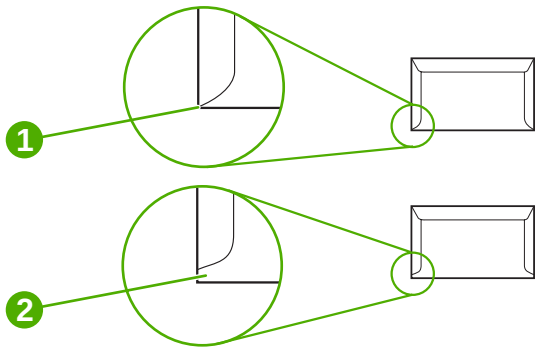
Envelope construction is critical. Envelope fold lines can vary considerably, not only between manufacturers, but also within a box from the same manufacturer. Successful printing on envelopes depends upon the quality of the envelopes. When selecting envelopes, consider the following components:

- **Weight**: The weight of the envelope paper should not exceed 105 g/m^2 (28 lb) or jamming might occur.
- **Construction**: Prior to printing, envelopes should lie flat with less than 6 mm (0.25 in) curl, and should not contain air.
- **Condition**: Envelopes should not be wrinkled, nicked, or otherwise damaged.
- **Temperature**: You should use envelopes that are compatible with the heat and pressure of the printer.
- **Size**: You should use only envelopes within the following size ranges.
  - **Minimum**: 76 x 127 mm (3 x 5 in)
  - **Maximum**: 216 x 356 mm (8.5 x 14 in)

NOTE Use only tray 1 to print envelopes. You might experience some jams when using any media with a length less than 178 mm (7 in). This might be caused by paper that has been affected by environmental conditions. For optimum performance, make sure you are storing and handling the paper correctly (see Printing and paper storage environment). Choose envelopes in the printer driver (see Printer drivers).

Envelopes with double side seams

Double side-seam construction has vertical seams at both ends of the envelope rather than diagonal seams. This style might be more likely to wrinkle. Be sure the seam extends all the way to the corner of the envelope as illustrated below.



1	Acceptable envelope construction
2	Unacceptable envelope construction

Envelopes with adhesive strips or flaps

Envelopes with a peel-off adhesive strip or with more than one flap that folds over to seal must use adhesives compatible with the heat and pressure in the printer. The extra flaps and strips might cause wrinkling, creasing, or even jams and might even damage the fuser.

Envelope margins

The following gives typical address margins for a commercial #10 or DL envelope.

Type of address	Top margin	Left margin
Return address	15 mm (0.6 in)	15 mm (0.6 in)
Delivery address	51 mm (2 in)	89 mm (3.5 in)

NOTE For the best print quality, position margins no closer than 15 mm (0.6 in) from the edges of the envelope. Avoid printing over the area where the envelope seams meet.

Envelope storage

Proper storage of envelopes helps contribute to print quality. Envelopes should be stored flat. If air is trapped in an envelope, creating an air bubble, then the envelope might wrinkle during printing.

For more information, see Printing on envelopes.

Labels

CAUTION To avoid damaging the printer, use only labels recommended for laser printers. To prevent serious jams, always use tray 1 to print labels and always use the rear output bin. Never print on the same sheet of labels more than once or print on a partial sheet of labels.

Label construction

When selecting labels, consider the quality of each component:

- **Adhesives:** The adhesive material should be stable at 200°C (392°F), which is the printer fusing temperature.
- **Arrangement:** Only use labels with no exposed backing between them. Labels can peel off sheets with spaces between the labels, causing serious jams.
- **Curl:** Prior to printing, labels must lie flat with no more than 13 mm (0.5 in) of curl in any direction.
- **Condition:** Do not use labels with wrinkles, bubbles, or other indications of separation.

For more information, see Printing on labels.

NOTE Choose labels in the printer driver (see Printer drivers).

Transparencies

Transparencies used in the printer must be able to withstand 200°C (392°F), which is the printer fusing temperature.

CAUTION To avoid damaging the printer, use only transparencies recommended for use in HP LaserJet printers, such as HP-brand transparencies. (For ordering information, see Part numbers.)

For more information, see Printing on transparencies.

NOTE Choose transparencies in the printer driver (see Printer drivers).

D Regulatory information

This section contains the following regulatory information:

- FCC regulations
- Environmental product stewardship program
- Declaration of conformity
- Safety statements

FCC regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If this equipment is not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase separation between equipment and receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/TV technician.

NOTE Any changes or modifications to the printer that are not expressly approved by HP could void the user's authority to operate this equipment.

Use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.

Environmental product stewardship program

Protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

Ozone production

This product generates no appreciable ozone gas (O_3).

Power consumption

Power usage drops significantly while in Sleep mode, which saves natural resources and saves money without affecting the high performance of this product. This product qualifies for ENERGY STAR® (Version 3.0), which is a voluntary program to encourage the development of energy-efficient office products.

ENERGY STAR® and the ENERGY STAR mark are U.S. registered marks. As an ENERGY STAR partner, Hewlett-Packard Company has determined that this product meets ENERGY STAR Guidelines for energy efficiency. For more information, see www.energystar.gov/.

Toner consumption

Economode uses significantly less toner, which might extend the life of the print cartridge.

Paper use

This product's optional automatic duplex feature and N-up printing (multiple pages printed on one page) capability can reduce paper usage and the resulting demands on natural resources.

Plastics

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

HP LaserJet printing supplies

It's easy to return and recycle your empty HP LaserJet print cartridges—free of charge—with HP Planet Partners. HP is committed to providing inventive, high-quality products and services that are environmentally sound, from product design and manufacturing to distribution, operation and recycling processes. We ensure your returned HP LaserJet print cartridges are recycled properly, processing them to recover valuable plastics and metals for new products and diverting millions of tons of waste from landfills. Since this cartridge is being recycled and used in new materials, it will

not be returned to you. Your empty HP LaserJet print cartridges are recycled responsibly when you participate in the HP Planet Partners program. Thank you for being environmentally responsible!

In many countries/regions, this product's printing supplies (for example, print cartridges) can be returned to HP through the HP Printing Supplies Returns and Recycling Program. An easy-to-use and free take back program is available in more than 35 countries/regions. Multilingual program information and instructions are included in every new HP LaserJet print cartridge and supplies package.

HP printing supplies returns and recycling program information

Since 1992, HP has offered HP LaserJet supplies return and recycling free of charge. In 2004, HP Planet Partners for LaserJet Supplies was available in 85% of the world market where HP LaserJet supplies are sold. Postage-paid and pre-addressed labels are included within the instruction guide in most HP LaserJet print cartridge boxes. Labels and bulk boxes are also available through the Web site: www.hp.com/recycle.

Use the label to return empty, original HP LaserJet print cartridges only. Please do not use this label for non-HP cartridges, refilled or remanufactured cartridges, or warranty returns. Printing supplies or other objects inadvertently sent to the HP Planet Partners program cannot be returned.

More than 10 million HP LaserJet print cartridges were recycled globally in 2004 through the HP Planet Partners supplies recycling program. This record number represents 26 million pounds of print cartridge materials diverted from landfills. Worldwide, in 2004, HP recycled an average of 59% of the print cartridge by weight consisting primarily of plastic and metals. Plastics and metals are used to make new products such as HP products, plastic trays, and spools. The remaining materials are disposed of in an environmentally responsible manner.

- **U.S. returns.** For a more environmentally responsible return of used cartridges and supplies, HP encourages the use of bulk returns. Simply bundle two or more cartridges together and use the single, pre-paid, pre-addressed UPS label that is supplied in the package. For more information in the U.S., call 1-800-340-2445 or visit the HP Web site at www.hp.com/recycle.
- **Non-U.S. returns.** Non-U.S. customers should visit the www.hp.com/recycle Web site for further information regarding availability of the HP Supplies Returns and Recycling Program.

Paper

This product is capable of using recycled papers when the paper meets the guidelines outlined in the *HP LaserJet Printer Family Print Media Specification Guide*. This product is suitable for the use of recycled paper according to EN12281:2002.

Material restrictions

This HP product does not contain added mercury.

This HP product contains a battery that might require special handling at end-of-life. The batteries contained in or supplied by Hewlett-Packard for this product include the following:

HP LaserJet 5200L printer	
Type	Carbon monofluoride lithium battery BR1632
Weight	(1.5 g)

HP LaserJet 5200L printer	
Location	On formatter board
User-removable	No

廢電池請回收

For recycling information, you can go to www.hp.com/recycle, or contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

Disposal of waste equipment by users in private households in the European Union

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Material Safety Data Sheet (MSDS)

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (for example, toner) can be obtained by contacting the HP Web site at www.hp.com/go/msds or www.hp.com/hpinfo/community/environment/productinfo/safety.

For more information

To obtain information about these environmental topics:

- Product environmental profile sheet for this and many related HP products
- HP's commitment to the environment

- HP’s environmental management system
- HP’s end-of-life product return and recycling program
- Material Safety Data Sheets

Visit www.hp.com/go/environment or www.hp.com/hpinfo/community/environment/productinfo/safety.

Declaration of conformity

Declaration of conformity

Declaration of Conformity
according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name:	Hewlett-Packard Company
Manufacturer's Address:	11311 Chinden Boulevard, Boise, Idaho 83714-1021, USA

declares, that the product

Product Name:	HP LaserJet 5200L printer
Regulatory Model Number[3]:	BOISB-0502-00
Product Options:	ALL

conforms to the following Product Specifications:

Safety:	IEC 60950-1:2001 / EN60950-1:2001 +A11 IEC 60825-1:1993 +A1 +A2 / EN 60825-1:1994 +A1 +A2 (Class 1 Laser/LED Product) GB4943-2001
EMC:	CISPR 22:1993 +A1 +A2 / EN 55022:1994 +A1 +A2 - Class B[1] EN 61000-3-2:2000 EN 61000-3-3:1995 +A1 EN 55024:1998 +A1 +A2 FCC Title 47 CFR, Part 15 Class B[2] / ICES-003, Issue 4 GB9254-1998, GB17625.1-2003

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC, and carries the CE-Marking accordingly.

1) The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.

2) This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

3) For regulatory purposes, this product is assigned a Regulatory model number. This number should not be confused with the marketing name or the product number(s).

Boise, Idaho , USA

August 16, 2005

For regulatory topics only:

Australia Contact:	Product Regulations Manager, Hewlett-Packard Australia Ltd.,, 31-41 Joseph Street, Blackburn, Victoria 3130, Australia
European Contact:	Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE / Standards Europe,, Herrenberger Strasse 140, , D-71034, Böblingen, (FAX: +49-7031-14-3143)
USA Contact:	Product Regulations Manager, Hewlett-Packard Company,, PO Box 15, Mail Stop 160, Boise, ID 83707-0015, , (Phone: 208-396-6000)

Safety statements

Laser safety

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since August 1, 1976. Compliance is mandatory for products marketed in the United States. The printer is certified as a “Class 1” laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. Since radiation emitted inside the printer is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

WARNING! Using controls, making adjustments, or performing procedures other than those specified in this user guide may result in exposure to hazardous radiation.

Canadian DOC regulations

Complies with Canadian EMC Class B requirements.

« Conforme à la classe B des normes canadiennes de compatibilité électromagnétiques. « CEM ». »

VCCI statement (Japan)

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Power cord statement (Japan)

製品には、同梱された電源コードをお使い下さい。
同梱された電源コードは、他の製品では使用出来ません。

EMI statement (Korea)

B급 기기 (가정용 정보통신기기)

이 기기는 가정용으로 전자파적합등록을 한 기기로서
주거지역에서는 물론 모든지역에서 사용할 수 있습니다.

Laser statement for Finland

Luokan 1 laserlaite

Klass 1 Laser Apparat

HP LaserJet 5200L, laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle. Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (1994) mukaisesti.

VAROITUS !

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING !

Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

HUOLTO

HP LaserJet 5200L -kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

VARO !

Mikäli kirjoittimen suojakotelo avataan, olet alttiina näkymättömällelasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.

VARNING !

Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen. Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista: Aallonpituus 775-795 nm Teho 5 m W Luokan 3B laser.

E Working with memory

This section explains the memory features of the printer and provides steps for expansion.

- Overview
- Installing printer memory
- Checking DIMM installation
- Saving resources (permanent resources)
- Enabling memory for Windows

Overview

One dual inline memory module (DIMM) slot is available for upgrading the printer with more printer memory—DIMMs are available in 32, 48, 64, and 128 MB.

For ordering information, see Ordering parts, accessories, and supplies.

NOTE Single inline memory modules (SIMMs) used in previous HP LaserJet printers are not compatible with the printer.

To find out how much memory is installed in the printer, print a configuration page. See Using printer information pages.

Installing printer memory

You might want to add more printer memory to the printer if you often print complex graphics, print PostScript (PS) documents, or use many downloaded fonts. Added memory also gives you more flexibility in supporting job-storage features, such as quick copying.

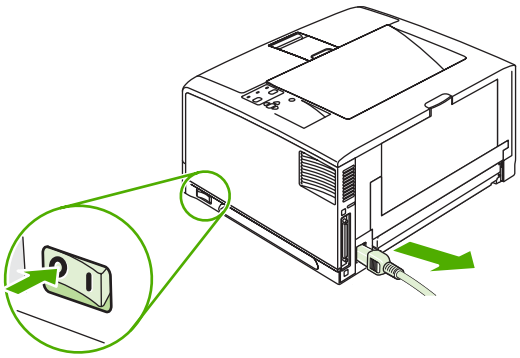
To install printer memory

CAUTION Static electricity can damage DIMMs. When handling DIMMs, either wear an antistatic wrist strap or frequently touch the surface of the DIMM antistatic package, then touch bare metal on the printer.

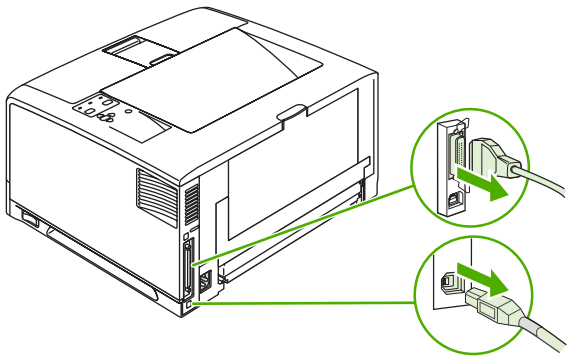
The HP LaserJet 5200L printers come with one DIMM slot. If desired, you can replace a DIMM installed in the slot with a higher memory DIMM.

If you have not already done so, print a configuration page to find out how much memory is installed in the printer before adding more memory. See Using printer information pages.

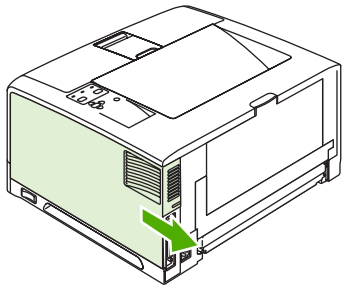
1. After the configuration page has printed, turn the printer off and disconnect the power cord.



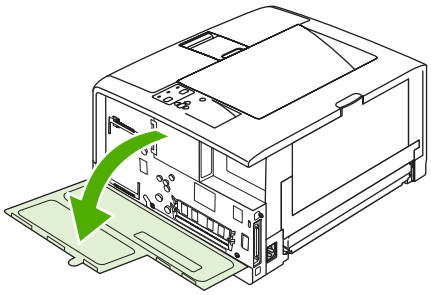
2. Disconnect all interface cables.



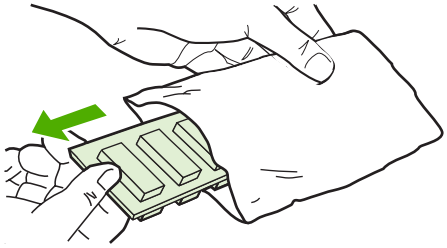
3. Remove the right side panel by sliding it towards the rear of the printer until the side slides from the printer.



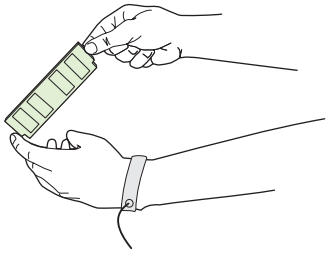
4. Open the access door by pulling on the metal tab.



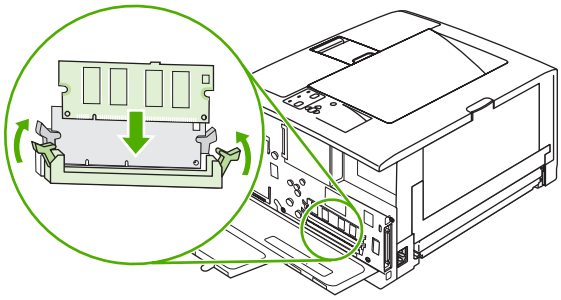
5. Remove the DIMM from the antistatic package.



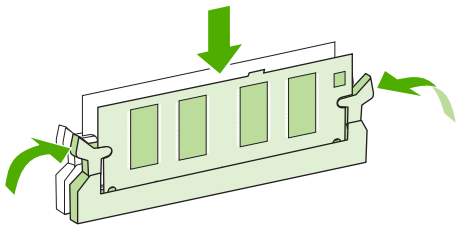
CAUTION To reduce the possibility of damage caused by static electricity, always wear an electrostatic discharge (ESD) wrist strap or touch the surface of the antistatic package before handling DIMMs.



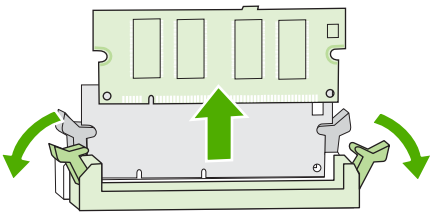
6. Hold the DIMM by the edges, and align the notches on the DIMM with the DIMM slot. (Check that the locks on each side of the DIMM slot are open.)



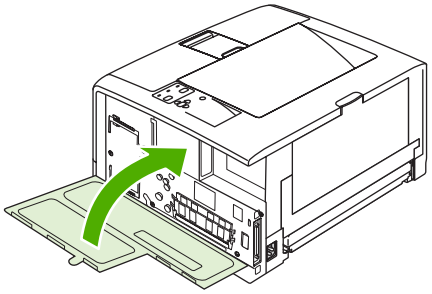
7. Press the DIMM straight into the slot, and press firmly. Make sure the locks on each side of the DIMM snap into place.



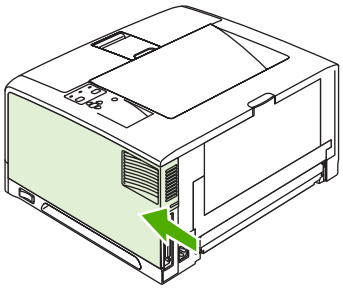
NOTE To remove a DIMM, first release the locks.



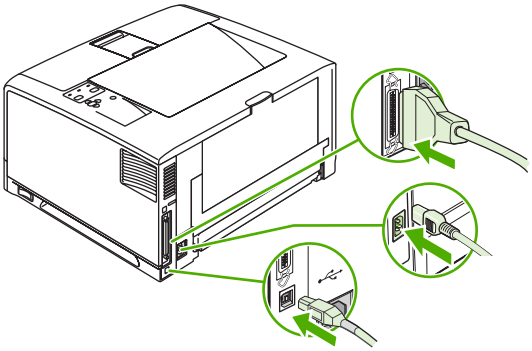
8. Close the access door, and press firmly until it snaps into place.



9. To replace the right side panel, line up the alignment arrows and slide the panel toward the front of the printer until it latches into place.



10. Reconnect the interface cable(s) and the power cord.



11. Turn the printer on.

Checking DIMM installation

After installing the DIMM, make sure that the installation was successful.

To verify that the DIMM is installed correctly

1. Turn the printer on. Check that the Ready light is illuminated after the printer has gone through the startup sequence. If an error message appears, the DIMM might have been incorrectly installed. See Control-panel messages.
2. Print a configuration page (see Using printer information pages).
3. Check the memory section on the configuration page and compare it to the configuration page that was printed before the memory installation. If the amount of memory has not increased, the DIMM might not be installed correctly, or it might be defective. Repeat the installation procedure. If necessary, install a different DIMM.

NOTE If you installed a printer language (personality), check the "Installed Personalities and Options" section on the configuration page. This area should list the new printer language.

Saving resources (permanent resources)

Utilities or jobs that you download to the printer sometimes include resources (for example, fonts, macros, or patterns). Resources that are internally marked as permanent remain in the printer memory until you turn the printer power off.

Use the following guidelines if you use the page description language (PDL) ability to mark resources as permanent. For technical details, see an appropriate PDL reference for PCL or PS.

- Mark resources as permanent only when it is absolutely necessary that they remain in memory while the printer power is turned on.
- Send permanent resources to the printer only at the beginning of a print job and not while the printer is printing.

NOTE Overusing permanent resources or downloading them while the printer is printing might affect printer performance or the ability to print complex pages.

Enabling memory for Windows

1. On the **Start** menu, point to **Settings**, and click **Printers** or **Printers and Faxes**.
2. Select this printer and select **Properties**.
3. On the **Configure** tab, click **More**.
4. In the **Total Memory** field, type or select the total amount of memory that is now installed.
5. Click **OK**.
6. Go to Checking DIMM installation.

F Printer commands

Most programs do not require you to specify printer commands. See your computer and software documentation to find the method for specifying printer commands, if needed.

PCL 6 and PCL 5e	PCL 6 and PCL 5e printer commands tell the printer which tasks to perform or which fonts to use. This section provides a quick reference for users who are already familiar with PCL 6 and PCL 5e command structure.
HP-GL/2	The printer can print vector graphics by using the HP-GL/2 graphics language. Printing in the HP-GL/2 language requires that the printer leave PCL 5e language and enter HP-GL/2 mode, which can be done by sending the printer PCL 5e code. Some programs switch languages through their drivers.
PJL	HP's Printer Job Language (PJL) provides control above PCL 5e and other printer languages. The four major functions provided by PJL are: printer language switching, job separation, printer configuration, and status readback from the printer. PJL commands can be used to change printer default settings.

NOTE The table at the end of this section contains commonly used PCL 5e commands. (See Common PCL 6 and PCL 5 printer commands.) For a complete listing and explanation of how to use PCL 5e, HP-GL/2, and PJL commands, see the *HP PCL/PJL Reference Set*, which is available on CD (HP part number 5961-0975).

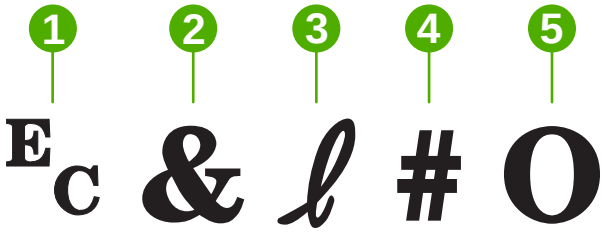
Understanding PCL 6 and PCL 5e printer command syntax

Before using printer commands, compare these characters:

Lowercase l:	l	Uppercase O:	O
Number one:	1	Number 0:	0

Many printer commands use the lowercase letter l (l) and the number one (1), or the uppercase letter O (O) and the number zero (0). These characters might not appear on your screen as shown here. You must use the exact character and case specified for PCL 6 or PCL 5e printer commands.

The figure below explains the elements of a typical printer command (in this instance, a command for page orientation).



1	Escape character (begins the escape sequence)
2	Parameterized character
3	Group character
4	Value field (contains both alpha and numeric characters)
5	Termination character (uppercase)

Combining escape sequences

Escape sequences can be combined into one escape sequence string. Follow these three important rules when combining code:

1. The first two characters after the E_c character are the parameterized and group characters. These characters must be the same in all of the commands that are to be combined.
2. When combining escape sequences, change the uppercase termination character in each individual escape sequence to lowercase.
3. The final character of the combined escape sequence must be uppercase.

The following is an example of an escape sequence string that would be sent to the printer to select legal-size media, landscape orientation, and eight lines per inch:

E_c&l3AE_c&l1OE_c&l8D

The following escape sequence sends the same printer commands by combining them into a shorter sequence:

E_c&l3a1o8D

Using escape characters

Printer commands always begin with the escape character (E_c).

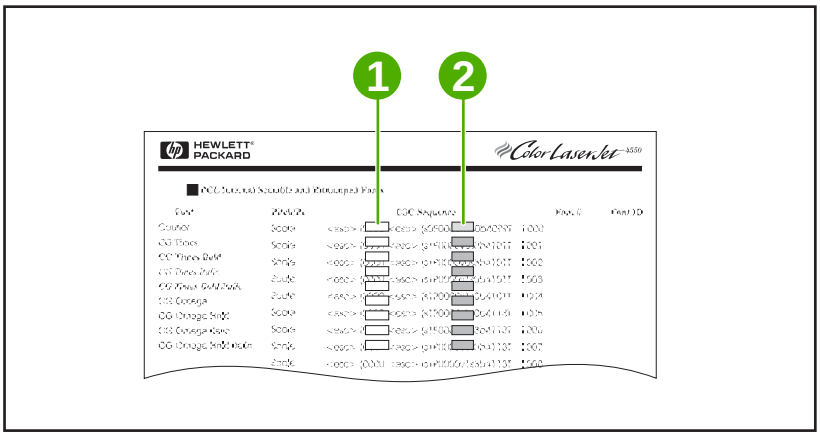
The following table shows how the escape character can be inserted in various MS-DOS programs.

DOS program	Entry	What appears
Lotus 1-2-3 and Symphony	Type `\027`	027
Microsoft Word for MS-DOS	Hold down Alt and type `027` on the numeric keypad	↔
WordPerfect for MS-DOS	Type <27>	<27>
MS-DOS Edit	Hold down Ctrl+P, and press Esc	↔
MS-DOS Edlin	Hold down Ctrl+V, and press [	^[
dBase	?? CHR(27)+"command"	?? CHR(27)+" "

Selecting PCL 6 and PCL 5 fonts

The printer font list provides PCL 6 and PCL 5 printer commands for selecting fonts. See Using printer information pages for information about how to print the list. A sample section is shown in the following illustration.

One variable box is available for specifying symbol sets and one for specifying point size. These variables must be filled in, or the printer will use defaults. For example, if you want a symbol set that contains line-draw characters, select the 10U (PC-8) or 12U (PC-850) symbol set. Other common symbol set codes are listed in the section Common PCL 6 and PCL 5 printer commands.



1	Symbol set
2	Point size

NOTE Fonts are either "fixed" or "proportional" in spacing. The printer contains both fixed fonts (Courier, Letter Gothic, and Lineprinter) and proportional fonts (CG Times, Arial, Times New Roman, and others). Fixed-spaced fonts are generally used in programs such as spreadsheets and databases, where it is important for columns to line up vertically. Proportional-spaced fonts are generally used in text and word-processing programs.

Common PCL 6 and PCL 5 printer commands

Table F-1 Job-control commands

Function	Command	Options (#)
Reset	E_cE	Not available
Number of copies	E_c&l#X	1 to 999
two-sided/one-sided printing	E_c&l#S	0 = Simplex (one-sided) printing 1 = Duplex (two-sided) with long edge binding 2 = Duplex (two-sided) with short edge binding

Table F-2 Page-control commands

Function	Command	Options (#)
Paper source	E_c&l#H	0 = Prints or ejects current page 1 = Tray 2 2 = Manual feed, paper 3 = Manual feed, envelope 4 = Tray 1 5 = Tray 3 6 = Optional envelop feeder 7 = Auto select 8 = Tray 4 20 to 69 = external trays
Paper size	E_c&l#A	1 = Executive 2 = Letter 3 = Legal 25 = A5 26 = A4 45 = JIS B5

Table F-2 Page-control commands (continued)

Function	Command	Options (#)
		80 = Monarch envelope
		81 = Commercial 10 envelope
		90 = DL ISO envelope
		91 = C5 ISO envelope
		100 = B5 ISO envelope/B5 ISO
		101 = Custom
Paper type	E_c&n#	5WdBond = Bond
		6WdPlain = Plain
		6WdColor = Color
		7WdLabels = Labels
		9WdRecycled = Recycled
		11WdLetterhead = Letterhead
		10WdCardstock = Cardstock
		11WdPrepunched = Prepunched
		11WdPreprinted = Preprinted
		13WdTransparency = Transparency
		#WdCustompapertype = Custom[1]
Orientation	E_c&l#O	0 = Portrait
		1 = Landscape
		2 = Reverse portrait
		3 = Reverse landscape
Top margin	E_c&l#E	# = Number of lines
Text length (bottom margin)	E_c&l#F	# = Number of lines from top margin
Left margin	E_c&a#L	# = Column number
Right margin	E_c&a#M	# = Column number from left margin
Horizontal motion index	E_c&k#H	1/120-inch increments (compresses print horizontally)
Vertical motion index	E_c&l#C	1/48-inch increments (compresses print vertically)
Line spacing	E_c&l#D	# = Lines per inch (1, 2, 3, 4, 5, 6, 12, 16, 24, 48)
Perforation skip	E_c&l#L	0 = Disable (turn off)
		1 = Enable (turn on)

[1] For custom paper, replace "Custompapertype" with the name of the paper, and replace the "#" with the number of characters in the name, plus 1.

Table F-3 Cursor Positioning

Function	Command	Options (#)
Vertical position (rows)	E_c&a#R	# = Row number
Vertical position (dots)	E_c*p#Y	# = Dot number (300 dots = 1 in)
Vertical position (decipoints)	E_c&a#V	# = Decipoint number (720 decipoints = 1 in)
Horizontal position (columns)	E_c&a#C	# = Column number
Horizontal position (dots)	E_c*p#X	# = Dot number (300 dots = 1 in)
Horizontal position (decipoints)	E_c&a#H	# = Decipoint number (720 decipoints = 1 in)

Table F-4 Programming hints

Function	Command	Options (#)
End of line wrap	E_c&s#C	0 = Enable (turn off) 1 = Disable (turn on)
Display functions on	E_cY	Not available
Display functions off	E_cZ	Not available

Table F-5 Language selection

Function	Command	Options (#)
Enter PCL 6 or PCL 5 mode	E_c%#A	0 = Use previous PCL 5 cursor position 1 = Use current HP-GL/2 pen position
Enter HP-GL/2 mode	E_c%#B	0 = Use previous HP-GL/2 pen position 1 = Use current PCL 5 cursor position

Table F-6 Font selection

Function	Command	Options (#)
Symbol sets	E_c(#	8U = HP Roman-8 Symbol Set 10U = IBM Layout (PC-8) (code page 437) Default Symbol Set 12U = IBM Layout for Europe (PC-850) (code page 850) 8M = Math-8 19U = Windows 3.1 Latin 1

Table F-6 Font selection (continued)

Function	Command	Options (#)
		9E = Windows 3.1 Latin 2 (commonly used in Eastern Europe) 5T = Windows 3.1 Latin 5 (commonly used in Turkey) 579L = Wingdings Font
Primary spacing	E_c(s#P	0 = Fixed 1 = Proportional
Primary pitch	E_c(s#H	# = Characters/inch
Set pitch mode[1]	E_c&k#S	0 = 10 4 = 12 (elite) 2 = 16.5 - 16.7 (compressed)
Primary height	E_c(s#V	# = Points
Primary style	E_c(s#S	0 = Upright (solid) 1 = Italic 4 = Condensed 5 = Condensed italic
Primary stroke wt.	E_c(s#B	0 = Medium (book or text) 1 = Semi bold 3 = Bold 4 = Extra bold
Typeface	E_c(s#T	Print a PCL 6 or PCL 5 font list to view the command for each internal font.

[1] The preferred method is to use the primary pitch command.

Glossary

bidirectional communication Two-way data transmission.

bin A receptacle for holding printed pages.

calibration The process in which the printer makes internal adjustments to produce the best print quality.

chooser A Macintosh accessory that you use to select a device.

control panel The area on the printer that contains buttons and a display screen. Use the control panel to set printer settings and to get information about the printer status.

default The normal or standard setting for hardware or software.

DIMM Abbreviation for “dual inline memory module.” A small circuit board that holds memory chips.

Emulated PostScript Software that emulates Adobe PostScript, a programming language that describes the appearance of the printed page. This printer language appears as “PS” in many menus.

firmware Programming instructions that are stored in a read-only memory unit inside the printer.

font A complete set of letters, numerals, and symbols in a typeface.

fuser The assembly that uses heat to fuse the toner onto the print media.

grayscale Various shades of gray.

halftone pattern A halftone pattern uses differing sizes of ink dots to produce a continuous-tone image such as a photograph.

HP Easy Printer Care software Software that provides the ability to track and maintain printers from your computer desktop.

I/O Abbreviation for “input/output,” refers to computer-port settings.

media The paper, labels, transparencies, or other material on which the printer prints the image.

memory tag A memory partition that has a specific address.

monochrome Black and white. Devoid of color.

page buffer Temporary printer memory used to hold page data while the printer creates an image of the page.

PCL Abbreviation for “Printer Control Language.”

peripheral An auxiliary device, such as a printer, modem, or storage system, that works in conjunction with a computer.

personality Distinctive features or characteristics of a printer or printer language.

pixel Abbreviation for “picture element,” the smallest unit of area in an image displayed on a screen.

PJL Abbreviation for “printer job language.”

PostScript A trademarked page-description language.

PPD Abbreviation for “PostScript printer description.”

printer driver A software program that a computer uses to gain access to printer features.

RAM Abbreviation for “random access memory,” a type of computer memory that stores data that can change.

raster image An image composed of dots.

render The process of producing text or graphics.

ROM Abbreviation for “read-only memory,” a type of computer memory that stores data that should not change.

supplies Materials that the printer uses and that must be replaced. The supply item for this printer is the print cartridge.

toner The fine black or colored powder that forms the image on the printed media.

transfer unit The black plastic belt that transports media inside the printer and transfers toner from the print cartridge onto the media.

tray The receptacle that holds blank media.

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